CONSUMER ACCEPTANCE OF PHARMACIST PRESCRIBING

BY

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN
PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

1987

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by

Albert Stanton Pennock

To the citizens of Florida whose cooperation
made this study possible
and to "J," my special friend
whose very presence gave me the impetus
to continue this work.

ACKNOWLEDGMENTS

I am very grateful for having had the opportunity to study here, to have been associated with so many fine and wonderful people, and to have learned many new and exciting things. I will always consider Dr. William McCormick, Dr. Richard Angorn, Dr. Carole Kimberlin, Dr. Donna Berardo, Dr. Howard Eng, and Dr. Wes Hutchinson to be a part of my family, as each person has had a definite influence on me during the formative years of my educational development. I am also very grateful to Ned Phillips for his patient assistance in guiding my use of the University computing facilities.

I owe a great deal to my close friends, parents, and other relatives for their continuous support and constant interest in my work. This includes the sharing of my educational program and of my research findings that I report here.

I would like to thank all the many cooperative consumers in the state of Florida who gave me their time so that I was able to collect the data necessary for this research project. These people probably will never know who I am or how much they were able to help me. My heart goes out to the many people who used me as a listening ear and told me of the difficult personal situations in which they were involved.

Lastly I would like to acknowledge two of my former professors from the University of Texas, Dr. Robert G. Brown, Associate Professor of Pharmacology, and Dr. Ester Jane Hall, Associate Professor of Pharmacy Administration. Undoubtedly these two people also have had a definite influence on the direction of my life.

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Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

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May, 1987

Chairman: William C. McCormick
Major Department: Pharmacy

Florida is the first state to enact legislation that allows its licensed pharmacists to independently prescribe legend drugs (drugs required to be sold only a prescription of a practitioner licensed by law). Although, initially, pharmacists may only prescribe such drugs from a limited formulary, the act may later be expanded to encompass a much larger formulary of these drugs. The drugs presently included are used to treat minor and/or self-limiting conditions, for which the patient otherwise might be forced to purchase a less effective over-the-counter drug or visit a physician in order to obtain a prescription.

Pharmacist prescribing is one way in which the profession of pharmacy can better serve the health needs of the public. This study points out (1) the consumers the law will benefit most and (2) what pharmacists can learn from consumers in order to more effectively practice their profession.

The methodology employed to obtain the necessary information was a telephone survey of consumers representing the entire state of Florida. The interviews were performed by random digit dialing. A total of 402 consumers was interviewed for a response rate of 53%.

Overall, respondents reported favorable attitudes and opinions regarding their health care. Concerning their acceptance of pharmacist prescribing, the variable "consumer's relationship with physicians" was not significant. However, "consumer's relationship with pharmacists" was significant. When consumer demographic characteristics were related to their acceptance of pharmacist prescribing, only three characteristics showed evidence of significance. These were age, marital status, and the presence of dependent children in the household.

The consumers the law will help most are those who reported that they frequently seek the advice of a pharmacist. Many of these consumers also have bonds (defined as close, personal working relationships) with their pharmacists. Essentially, these consumers appear to be practicing self-care.

In order for pharmacists to more effectively practice their profession, they should be viewed by the public as being available by telephone, easily approachable, and able to dispense competent advice. The consumers who expressed such feelings about pharmacists were those who were found to be the most likely to accept pharmacist prescribing.

CHAPTER I
THE PROBLEM

Introduction

According to data published by the Health Care Financing Administration, the 1985 aggregate health care expenditure in the United States amounted to $425 billion, 10.7% of the gross national product (Waldo, Levit, & Lazenby, 1986). This translates to a per capita expenditure of $1,721. Although hospital services accounted for 39¢ of each dollar spent, fees for physicians' services, which was included in "other personal expenditures," was in second place at 20¢.

The Review of Over the Counter Drugs (Review) by the Federal Food and Drug Administration (FDA) represents an attempt by the government to reduce health care costs by reclassifying many prescription drugs to over-the-counter (OTC) status if they are shown to be safe and effective for self-administration (Gerald, 1979). Today, about 75% of all health complaints are self-treated at a cost of 2¢ or 3¢ of each health dollar ("OTC therapy cost effective," 1982). One result of the Review is that new OTC product introductions in the U.S. jumped to 300 in the first four months of 1984 compared with 253 one year earlier ("OTC's on the rise," 1984).

The American Pharmaceutical Association (APhA) has expressed concern that some of the newer OTC drugs are not totally safe for self-administration and are subject to improper use or abuse. It takes the position that the public would be more effectively served if a new "third class" of drugs were to be created that could be sold only by a pharmacist after a brief consultation with the patient (Kesselman, 1983).

The Proprietary Association (PA), a trade association representing manufacturers of over-the-counter drugs, opposes the establishment of a "third class" of drugs. It rejects APhA's claim of more effective service to the patient and takes the position that such drugs would be of limited availability and sold at higher prices due to a decrease in retail competition (Ugoretz, 1983).

Regardless of the public debates among several special interest groups, the FDA claims it currently lacks regulatory authority to create a "third class" of drugs. According to the FDA, this could only be accomplished by amending the Food, Drug, and Cosmetic Act which would require special action by Congress. However, in the case of legend drugs (drugs required to be sold only on prescription of a practitioner licensed by law), the law's requirement for dispensing "only on the prescription of a licensed practitioner" does not specify who a licensed practitioner is. This is left to the individual states to determine.

One way of helping to reduce the burden of health care costs on consumers within the existing legal framework would be to allow pharmacists to prescribe legend drugs. The state legislature of Florida enacted such a law. Covington (1983) describes other pharmacist prescribing laws in the states of California, Oregon, and Washington. Yet, in these states, pharmacists have only "dependent authority" in that their prescribing powers are delegated by a practitioner who is authorized to prescribe. The Florida law allows pharmacists to have "independent authority" and creates a special committee with authority to establish a formulary of enumerated drugs which can be prescribed by pharmacists in accordance with established guidelines.

While this law was enacted for the purpose of financially benefiting consumers, not all consumers will choose to avail themselves of the law's provisions, because they feel that the existing system, which entails visiting a physician for an evaluation and visiting a pharmacy for a prescription or an over-the-counter drug, is sufficient.

This investigation is of particular importance for the continuation and possible expansion of the law. Although the law went into effect October 1, 1985, it is slated to be repealed automatically October 1, 1996. At that time, the state legislature of Florida will choose either to eliminate it or to renew it in its reenactment of the Pharmacy Practice Act.

Problem Statement

The basic question to be answered is "to what extent will pharmacist prescribing be accepted by consumers?" There are six components to be addressed.

1. How do consumers' views regarding physicians affect attitudes toward pharmacist prescribing?
2. How do consumers' views regarding pharmacists affect attitudes toward pharmacist prescribing?
3. To what extent, if any, do attitudes toward pharmacist prescribing differ by demographics?
4. How does consumer health status affect attitudes toward pharmacist prescribing?
5. Would consumers be willing to pay a small fee for a private and uninterrupted consultation with a pharmacist regarding drug product selection?
6. Would consumers be willing to accept pharmacist prescribing if a third-party assumed responsibility for payment?

Significance of Problem

When the pharmacist prescribing issue was restricted to the creation of a "third class" of drugs, some authorities described it as a fight for sales dollars between pharmacies and mass merchandisers ("Drugstores facing wider competition," 1984). A study by Drug Topics showed that consumers who look for value and convenience make most of their OTC purchases in general merchandise stores (Laverty, 1984c). A separate study by Charles H. Kline and Co. showed that food stores alone had increased their share of the OTC market by approximately 6% each year from 1979 through 1983 ("Keeping up with your OTC rivals," 1984). The Proprietary Association conducted a survey of its own and concluded that consumers are taking more responsibility for their own treatment and that they find OTC medications to be both safe and reliable ("Health care practices and perceptions," 1984).

In contrast, health care professionals pointed to examples of OTC drugs that had been misused. The metaproternol inhaler was reclassified from prescription to OTC status. In the absence of professional advice, a large number of consumers misused the product. This resulted in the inhaler being returned to prescription status (Caputo, 1984). Pharmacy groups preferred to see such products classified into a new limited OTC category which could be sold only by pharmacists. Now, instead of recommending and selling drugs from a "third class," Florida pharmacists are able to prescribe prescription drugs from a limited formulary in accordance with approved dispensing procedures.

The results of this study will be useful to policy makers in making knowledgeable decisions concerning pharmacists' prescribing. Pharmacists realize that improved patient contact will lead to enhanced professional standing ("Communicating the value of comprehensive pharmaceutical services," 1973; "What is the Dichter Institute saying about you?" 1973). It also brings customers into their stores (Gagnon, 1976; Galloway & Eby, 1977; Kabat, 1969; McGhan, Hurd, Johnson, & McKennell, 1980; Nickel & Wertheimer, 1979). Yet many pharmacists are perceived by the public as being "too busy" to be available (Knapp, Knapp, & Engel, 1966).

Pharmacist prescribing provides a way in which the profession of pharmacy can expand its health services to the public. If pharmacist prescribing is to gain public acceptance, then pharmacists will have to practice their profession differently than commonly perceived. That is, they must be more patient oriented and less dispensing oriented. This study points out (1) the categories of consumers the law will benefit most and (2) what pharmacists can learn from consumers in order to more effectively practice their profession.

Since the law is relatively new, there is the possibility that many consumers will not be aware of the services now available. In addition, many consumers who are aware of the law may not have availed themselves of its intended benefits. Therefore, this study provides "baseline" information concerning consumer intent to use the service and not actual consumer utilization.

At times, pharmacists have been characterized as "over-educated" and "under-utilized." In addition, pharmacists have been characterized as "the most available members of the health care profession" (Covington, 1983, p. 166). The Florida Pharmacist Prescribing Law opens another avenue to the public in obtaining increased access to medical care.

CHAPTER II
BACKGROUND CONCERNING THE FLORIDA PHARMACIST PRESCRIBING LAW

Early Legislation

A chronological outline of Federal legislation as compiled by Wilkerson and Pietrangelo (1983) follows. The Pure Food and Drug Act, 34 Stat. 768(1906), was the first federal enactment to regulate the manufacture of pharmaceuticals. It required that all drugs must meet the standards of strength and purity claimed by the manufacturer. The Act formally recognized the United States Pharmacopeia and the National Formulary as official compendia to set legal standards for drugs. It prohibited false and misleading claims but did not specifically prohibit false therapeutic claims.

The Sherley Amendment, 37 Stat. 416(1912), prohibited manufacturers from making false and fraudulent therapeutic claims about a product. This was difficult to enforce because the burden of proving fraud was placed on the government. The amendment seemed to correct many of the Act's perceived deficiencies in regulating the production and distribution of pharmaceuticals. However, it still did not require evidence of safety prior to marketing; nor did it regulate the advertising of drugs.

Probably the most precipitating event in drug legislation history was the "Sulfanilamide Elixir." Over 100 people died from a new product that had not been tested for safety. This occurrence so aroused public pressure that Congress, as a result, passed the Food, Drug, and Cosmetic Act (FDCA), 52 Stat. 1040(1938), which for the first time required that drugs be proven to be safe prior to marketing. The Act also established the Food and Drug Administration (FDA).

Internecine squabbling regarding which agency had enforcement jurisdiction over false advertising gave cause for considerable concern. The Federal Trade Commission (FTC) lobbied against sharing jurisdiction with the FDA. The Proprietary Association and other trade organizations of OTC manufacturers supported the FTC. The central objection stemmed from the holding in Federal Trade Commission v. Raladam, 51 SCt 86, 52 SCt 14. Here, a Supreme Court decision limited FTC authority only to false advertising in which an injury to competition could be shown. Pharmacist legislators Wheeler and Lea sought to give the FTC full responsibility for advertising by congressional enactment. The Wheeler-Lea Act, 15 USC Secs. 12-15(1938), prohibited the dissemination of any false advertising for the sale of food, drugs, devices, or cosmetics. Included also was the omission of any material fact that may result in a misleading advertisement. Such actions constitute unfair or deceptive practices under the FTC Act. In summary, the FTC gained jurisdiction over drug advertising while the FDA retained jurisdiction over labels and labeling.

The Durham-Humphrey Amendment, 21 USC Sec. 353(6)(1) (1951), to the Food, Drug, and Cosmetic Act officially divided drugs into two categories, prescription and non-prescription. The amendment required that prescription drugs in the manufacturers' package now contain the legend "Caution: Federal law prohibits dispensing without a prescription." These "legend drugs" are restricted to sale only upon a prescription order and may not be refilled by a pharmacist without the authorization of the prescriber.

The Kefauver-Harris Amendment, 76 Stat. 780(1962), required manufacturers to establish the safety and efficacy of all new prescription drug products prior to marketing. In addition, drugs approved for marketing by the FDA between 1938 and 1962 were required to undergo an efficacy review. Since more than 3000 drugs were involved, the FDA contracted with the National Academy of Sciences and its research division, the National Research Council to evaluate the drugs. This program was termed the Drug Efficacy Study Implementation (DESI) whereby each product reviewed was classified as effective, probably effective, possibly effective, or not effective.

Due to the large number of OTC drugs involved, the FDA ruled in 1972 that a separate review for OTC drugs would be required. To accomplish this, the FDA appointed 17 advisory panels of physicians, pharmacologists, toxicologists, and pharmacists. The Review involved approximately 350,000 products containing approximately 1100 ingredients that were assigned to 70 categories according to pharmacologic groupings (Mercill, 1983). The advisory panels studied ingredients, concentrations, dosage schedules, formulations, and labeling. Uniform standards were established for the safety, efficacy, and labeling of nonprescription products. Each OTC ingredient was assigned to a monograph that contained a description of the ingredients, indications for use, directions for use, and other conditions that related to safety and efficacy. The monographs were classified as follows:

Category I:	generally recognized as safe and effective
Category II:	unsafe, ineffective, or improperly labeled
Category III:	insufficient data for a classification in either Category I or II.

The OTC Drug Pipeline

Under Federal law, habit forming and potentially harmful drugs are restricted to prescription sale, but drug products for use in self-medication are generally available if they can be adequately labeled for use by the general public (Mercill, 1983). The underlying rationale is that if a drug is safe for lay use on the basis of its labeling alone, then it must be made available for OTC sale.

From 1938 until the beginning of the OTC Review in 1972, FDA decisions on drug status were erratic; many of these decisions were made at the urging of the drug manufacturers (Murphy, 1984). Nevertheless, between 1951 and 1983, only slightly more than 50 such products were reclassified by the FDA from prescription status to OTC status (Becker, 1984).

By 1983, the OTC Review had been ongoing for 11 years. An FDA report estimated that the review would cost industry as much as $91.5 million in relabeling, reformulation, and testing expenses ("OTC drug review could cost $92 million," 1983). This translates into a cost of .2% to .4% of the OTC drug industry's sales.

In 1980, FDA Commissioner Goyan proposed to members of an agency panel that the FDA should create a special committee to consider additional candidates for OTC status once the review is completed (Mercill, 1983). Peter Hutt, former counsel for the FDA and sometimes called the "father" of the OTC review, remarked, "There is virtually no limit to the number of prescription drugs that are potential candidates for transfer to non-prescription status" (Murphy, 1984, p. 14).

Other than the OTC review, there are two other pathways for creating new OTC drugs: (1) a manufacturer may submit a New Drug Application (NDA) to the FDA in a format similar to that required for prescription drugs; and (2) existing OTC monographs may be expanded by the FDA as to usage after hearing evidence from a manufacturer, an FDA advisory committee, or any member of the general public (Murphy, 1984). Hutt claims that there is still a major backlog of items to be considered.

The "Third Class" of Drugs

James Dolusio (1983), Dean of the College of Pharmacy at the University of Texas at Austin, has pointed out that pharmacists are in a unique position to assist and advise patients who choose self-medication. Although higher standards of safety have been established for OTC drugs than for prescription drugs since they are intended to be used in the absence of medical supervision, there are no practical provisions available for monitoring their safe usage (Gerald, 1979). According to Dean Dolusio, the public does not fully comprehend its limitations in self-diagnosing and utilizing medication and the risks of exceeding those limitations. Gerald (1979) points out that potential risks might be due to (1) an adverse drug reaction even when the OTC drug is taken as directed, (2) an acute toxicity from overdose, (3) a drug-drug interaction, or (4) an inappropriate therapeutic use resulting from a misdiagnosis.

Gerald (1979) claims that it is the FDA's responsibility to determine the safety and efficacy of OTC drugs and that pharmacists have a professional responsibility to help patients assess the promotional claims made by manufacturers. It has been estimated that a physician is involved in only about 5% of all instances in which a patient perceives and treats a health problem (Dolusio, 1983). Self-medication is used as a treatment mode in 75% of these instances.

The American Pharmaceutical Association (APhA) has long sought to classify drugs into four classes: (1) prescription, (2) over-the-counter, (3) drugs which may be dispensed on the order of a pharmacist, and (4) prescription drugs that are renewable at the pharmacist's discretion (Kesselman, 1983; Ugoretz, 1983). The proposed "third class" of drugs would be composed of drugs that are not sufficiently dangerous to require a physician's supervision, but nevertheless might require some degree of counseling and screening by a pharmacist (Mercill, 1983).

According to Sol Kesselman (1983), Chairman of the Illinois Association of Community Pharmacists executive board, the FDA's shifting of many drugs from prescription to OTC status illustrates the need for a "third class" of drugs. He states that the public would receive better service and greater protection at a lower cost than is usually associated with obtaining prescription drugs. The pharmacist would act as a safety net in forestalling drug misuse among patients. Kesselman added,

> - Competition would keep prices down, as has happened with prescription drugs, the most restricted class
> - a third class of drugs would only involve a small percentage of drugs
> - a third class of drugs would allow the FDA more leeway in releasing drugs for public sale and would therefore lower medical costs. (1983, p. 12)

The FDA does not recognize a "third class" of drugs (Mercill, 1983). Mercill notes that in 1974, the Department of Justice stated in a letter to the FDA that a "third class" of drugs would result in less competition, less convenience, and higher prices. The FDA commissioner agreed and replied that a "third class" of drugs would decrease the number of outlets where OTC drugs could be sold, cause prices to rise, and result in no public benefit.

J.D. Ugoretz (1983), Assistant General Counsel of the Proprietary Association, said that a "third class" of drugs would not result in greater consumer protection, but in less consumer choice, less convenience, and higher prices. Ugoretz continues,

> The philosophy behind our present system of drug regulation is that if a drug can be used safely by a consumer on the basis of labeling directions without professional supervision, then it shall be generally available to consumers over the counter. . . . On the other hand, a drug that cannot be used safely without the supervision of a physician . . . shall be restricted to sale and use only by prescription. (1983, p. 11)

A public hearing was held in Newark, New Jersey, in May, 1984, to gather information pertaining to a New Jersey Pharmaceutical Association backed proposal for a "third class" of drugs ("Third class of drugs runs into stiff opposition," 1984). William Halsey, Director of Government Relations for the New Jersey Chamber of Commerce, claimed that such a proposal would create a "druggists monopoly" that would result in a severe reduction in sales for the pharmaceutical industry as the number of retail outlets is decreased. Charles Marcinate, President of the New Jersey AFL-CIO stated that,

> . . . there is no need for it . . . it understates the intelligence of the consumer . . . it would increase the already unaffordable prices of medicines due to more pharmacist time required . . . the third class proposal was generated by pharmacists not consumers. ("Third class of drugs runs into stiff opposition," 1984, p. 15)

James Barry, Director of the New Jersey Division of Consumer Affairs, asserted that the "third class" of drugs would be ". . . anticonsumer . . . limit availability . . .

not allow the consumer to compare labels . . ." ("Third class of drugs runs into stiff opposition," 1984, p. 15).

Ugoretz concluded his statement by saying,

> If a consumer has a question about ingredients or actions of an OTC drug or its labeling, pharmacists are a knowledgeable source of information. But if a consumer has no questions, then he should not be compelled by law to buy it in a drugstore. (1983, p. 12)

Kesselman countered, "Congress may not care if the corner drugstore survives, but it can't ignore the growing evidence of damage to the elderly and other sectors of the population caused by the misuse and abuse of some OTC drugs" (1983, p. 12).

The Florida Pharmacist Prescribing Law

One way of circumventing the "third class" of drugs issue is to change the current restrictive state statutes so that they encompass new types of prescribers, such as pharmacists. Although such action might result in a slow-down in the reclassification of many prescription drugs to OTC status or provide the states with a reason to restrict certain OTC drugs to sale only by prescription, the public is most likely to benefit. Pharmacists will be in a position to advise and counsel patients regarding drugs, hitherto unavailable without prescriptions from traditional practitioners, that might be considered unsafe for ordinary self-medication yet which may be adequate for treatment of minor disease states.

The state of Florida now includes pharmacists among those authorized by law to prescribe medicinal drugs. The term "prescription" in the Florida statutes now includes an order by a pharmacist for a drug product selected from a special formulary. More specifically, the Pharmacist Prescribing Law, 465.186 Fla. Stat. (1985), includes the following features:

1. A committee is created which has the responsibility of establishing a formulary of drugs which can be made available to the public upon the order of a pharmacist.
2. The composition of the committee consists of two M.D. members of the Board of Medical Examiners, one D.O. member of the Board of Osteopathic Medical Examiners, three pharmacist members of the Board of Pharmacy, and one additional member with training in pharmacology or health care appointed by the other members of the committee.
3. The law specifies the categories of drugs permissible for inclusion and charges the committee with establishing the formulary and any necessary dispensing instructions. The categories are
    a. Any medicinal drug of single or multiple active ingredients in any strengths when such active

ingredients have been approved individually or in combination for OTC sale by the FDA.

  b. Any medicinal drug recommended by the FDA Advisory Panel for transfer to OTC status, pending approval by the FDA.
  c. Any medicinal drug containing any antihistamine or decongestant as a single active ingredient or in combination.
  d. Any medicinal drug containing fluoride in any strength.
  e. Any medicinal drug containing lindane in any strength.
  f. The formulary may not include any OTC drugs.

4. The formulary of medicinal drugs and dispensing procedures established by the committee must be adopted as a rule under the Florida Administrative Procedure Act in order to become effective.
5. Any drug product ordered by a pharmacist must be selected and dispensed only by that pharmacist and the order is not refillable. In addition, no other drug may be ordered for the same condition unless such act is consistent with the dispensing procedures established by the committee. The pharmacist must create and maintain a prescription record in the form required by law.

6. The pharmacist must affix to the container, a label with the following information:
    - a. The name of the pharmacist.
    - b. The name and address of the pharmacy.
    - c. The date of dispensing.
    - d. The prescription order number.
    - e. The name of the patient.
    - f. The directions for use.
    - g. A clear and concise statement that the order may not be refilled.
7. The pharmacist is eligible for reimbursement by third party prescription programs when so provided by contract or when otherwise provided by such program.
8. There are penalties for violations of the provisions of the law.
9. The law took effect October 1, 1985, and will be automatically repealed under Florida's Regulatory Sunset Law on October 1, 1996, unless reenacted by the state legislature prior to that date.

CHAPTER III
REVIEW OF THE LITERATURE

A summary of the literature is presented and appears under four general headings. A "general discussion" distinguishes OTC drugs from prescription drugs, presents consumer expenditures on self-medication, and describes the extent of OTC drug availability. The "American pharmacy consumer" is profiled and his reasons for choosing a particular pharmacy are identified. "Pharmacy consumer behavior" outlines the interactions between pharmacists and patients. "Prescribed and nonprescribed drug use" examines the correlates of health care consumers and their health seeking behavior.

OTC Drugs--General Discussion

As indicated, this section is composed of three subsections. First, OTC drugs are distinguished from prescription drugs; second, consumer expenditures on self-medication are presented; and third, the extent of OTC drug availability is explored.

Definitions of OTC Drugs

Acçording to a definition by Mercill,

> Nonprescription drugs are those that are lawfully sold over the counter for the public to use in self-medication without professional supervision

> on the basis of labeling that provides adequate directions for proper use. (1983, p. 207)

He differentiates them from prescription drugs by stating,

> Prescription drugs are those that, because of their potentially harmful effects, their method of use, or their collateral measures required, are not safe for self-medication and accordingly must be dispensed only under the supervision of a prescribing physician or dentist. (p. 207)

For the most part, OTC drug use is unsupervised by any member of the health care team. Patients diagnose their own symptoms, select an OTC drug product for themselves, and then monitor and evaluate their own therapeutic response to the medication (Smith, Czaplich, Sohocki, Kamikowski, & McKercher, 1978). Self-medication with OTC products is a common and important mode of therapy for treating mild, self-limiting symptoms and medical conditions (Becker, 1984). Over-the-counter drugs are a first line of defense in health care. They are inexpensive and convenient (Mercill, 1983). In a study of a national sampling of 2000 families, 7 of every 10 consumers were found to self-medicate "frequently" with OTC products (Inhorn, 1981).

Consumer Expenditures on Self-Medication

The high frequency of use of OTC drug products has been attributed to the rising education level of the general public (Knapp, Knapp, & Engel, 1966). That is, the public has an increased self-confidence in its ability to treat itself. In 1980, American consumers spent about $5.4 billion for OTC drugs which accounted for 2.3% of the nation's total health expenditures (Health Care Financing Administration, 1983). According to this study, the 1980 expenditures per person by category were found to be

for OTC drugs	$20 per person per year
for Rx drugs	$37 per person per year
for dentists	$46 per person per year
for physicians	$146 per person per year
for hospital services	$300 per person per year

Later data show that American consumers are now spending an aggregate amount of $9 billion yearly for OTC drugs (Becker, 1984).

Extent of OTC Drug Availability

Consumers have many OTC drug products to consider, as more than 350,000 such items were available in 1984 (Becker, 1984). Becker notes that consumers purchase approximately 60% of their aggregate OTC drug needs in pharmacy outlets. Slater (1979) adds that a typical pharmacy stocks 10,000 to 20,000 different OTC items. According to Slater,

- a full 90% are sold off the shelf without requiring any of the pharmacist's time in selection
- the consumer is inside the store for only a few minutes and has an average eye contact time per item of about 0.1 second

- over 40% of all buying decisions are made inside the store while the consumer is shopping. (1979, p. 315)

Some authorities claim that most people are limited in their ability to self-diagnose and that they may not be aware of the many potential problems associated with OTC products (Becker, 1984). According to Becker, the pharmacist is in a unique position to assess, educate, and advise patients in selecting the right drugs, in the right amounts, for the right reasons, and at the right times.

The American Pharmacy Consumer

This section describes the American pharmacy consumer in his search for medication advice. First, the trend toward purchasing OTC drugs from mass merchandise retailers is explored; and second, the Dichter Study is presented as a possible explanation of why consumers are relying less on the pharmacist as a source of help and information.

The Trend Toward Mass Merchandise Retailers

A study by Louis Harris in 1983 sponsored by the APhA showed that 6 of every 10 consumers purchase OTC drugs in a different outlet from where they have their prescriptions filled (Laverty, 1984c). Most consumers in the Harris study favored mass merchandise stores because of convenience, variety, and low prices. Another study by Charles H. Kline in 1984 indicated that OTC drug purchases are split between food stores, mass merchandisers, and drugstores ("Keeping up with your OTC rivals," 1984). Although drugstores are losing their share to the other outlets, the size of the market is expanding overall. Yet drugstores must compete with nonpharmacy retailers as more and more OTC drugs are sold in supermarkets and mass merchandise stores (Laverty, 1984a).

A 1982 study of the shopping habits of 2,000 consumers by Family Opinion, a market research company, pointed out that 53% are not loyal to a single drugstore but tend to shop in a variety of stores (Rosendahl, 1982). The most important factors in choosing a store were price and a pleasant shopping environment. A 1984 study of the shopping habits of 1,400 families by People Panel, another market research organization, disclosed that young couples/parents favored supermarkets, middle aged/parents favored mass merchandise stores, and older/retired persons favored drugstores (Laverty, 1984a). The Family Opinion study showed that most respondents buy more than one item at a time and that 25% of the respondents compare items in the store before purchase. Eighty-eight percent shop in stores that regularly advertise (Rosendahl, 1982).

The Dichter Study

Perhaps part of the trend toward purchasing OTC drugs and traditional drug store items from food stores and mass merchandise retailers can be explained by the findings of the Dichter Institute for Motivational Research. The study, commissioned by the APhA, sought to determine the public's attitude toward the pharmacist and his services ("Communicating the value of comprehensive pharmaceutical services to the consumer," 1973). Pharmacy has an unusual mix of professional service and commercialism that results in confusion in the minds of the public. That is, the study found that the public finds it difficult to perceive the pharmacist as a professional on the same plane as a physician or attorney. The public tends to think of the pharmacist as being closely aligned with the manufacturer or as a businessman with primarily commercial motivations. The key finding of the study was that the pharmacist has lost contact with his patients. As described by Smith,

> . . . one of the most prevalent perceptions is that the pharmacist hides behind a specialized counter in a corner of the establishment, makes a little bit of noise, and comes up with a small bottle and a large bill. (1980, p. 264)

The Dichter Study showed that patients expect and desire personal contact, attention, and professional service from their pharmacist. Patients desire an "ideal pharmacist" that is friendly, approachable, and concerned about his patients, one who maintains personal contact, and calls them by name ("What is the Dichter Institute saying about you?" 1973).

Instead, patients feel a sense of isolation and alienation. They feel that they are being "pushed away" from the pharmacist rather than being "pulled in" by the lower prices of the discount stores ("Communicating the value of comprehensive pharmacy services to the consumer," 1973). Without the opportunity to confer directly with the pharmacist, the public is likely to make its drug purchases at discount stores where prices are usually lower. Therefore, pharmacists are losing patrons because their customers feel that price is the only factor that needs to be considered ("What is the Dichter Institute saying about you?" 1973).

Pharmacy Consumer Behavior

This section presents findings from studies relative to interactions between pharmacists and patients. It includes consumer attitudes toward pharmacists, the pharmacist's role in patient counseling, the consumer's sources of help and information, the importance of pharmacist recommendations, and consumer willingness to pay for a pharmacist's services.

Consumer Attitude Toward the Pharmacist

A few years before the Dichter Study, Kabat (1969) found that most people visit a pharmacy in excess of their visits to any other health care outlet. Ninety percent of those people surveyed visited a pharmacy at least monthly while 60% visited a pharmacy at least weekly. Kabat studied consumer perceptions of different types of pharmacies and concluded that the independent community pharmacists were the only ones that had been able to maintain their personal identity to any significant degree. He termed pharmacists from chain and discount stores as "phantom pharmacists" and "generic pharmacists." He noted that in these stores, both the drugs and the services are standardized at an acceptable quality level so that the public's personal choice of pharmacist is unimportant from a quality point of view.

Many studies have found that the pharmacist is very important for the overall consumer perception of the pharmacy. Consumers want personalized professional contact with the pharmacist (Gagnon, 1976). They are concerned about having access to a competent pharmacist (McGhan, Hurd, Johnson, & McKennell, 1980) and that he be available when they need him (Gagnon, 1976). Heavy users of medications consider the pharmacist to be the most important factor in choosing a pharmacy (Nickel & Wertheimer, 1979). Some consumers say that liking their pharmacist is very important (Kabat, 1969). Low income consumers tend to view pharmacists more favorably than higher income consumers (Galloway & Eby, 1977).

Interestingly, the response to an item that the pharmacist "aids in the selection of OTC drugs" was rated as "unimportant" in one study (Stewart, Kabat, & Purohit, 1977). The authors hypothesized that this particular service was not generally being performed and that consumers had not learned to expect it.

When the pharmacist is not a factor in a consumer's choice of a pharmacy, then other services and conveniences are. For community pharmacies, location has been found to be most important (Kabat, 1969; Stewart, Kabat, & Purohit, 1977). For chain and discount pharmacies, price has been found to be most important (Nickel & Wertheimer, 1979; Stewart, Kabat, & Purohit, 1977).

Although no literature support is available, this study considered the possibility that consumers will be more likely to trust their pharmacist's judgment and advice if they have developed a personal "bond" with him. That is, many consumers who rely upon one particular pharmacist will also have a close personal working relationship with him. Therefore, this study employed the independent variable of "pharmacist bond" in order to explore this interpersonal relationship in determining if these consumers are more likely to accept pharmacist prescribing.

The Pharmacist's Role in Patient Counseling

Patient counseling has been defined as "the provision of information that will help patients to use their medications correctly" (Kirking, 1982, p. 230). Dickson and Rodowskas (1975a) found that their sample of pharmacists devoted a total of 11% of their time communicating. The vast majority of their communication was verbal and with patients. However, only one half of this time was spent on professional communications. Kirking (1982) found that pharmacists favor counseling although the sessions are usually brief and unidirectional. That is, Kirking noted an absence of dialogue, where the pharmacists did the talking and the patients did the listening. Dickson and Rodowskas (1975b) found that pharmacists in prescription-oriented pharmacies devoted more time to patient communication than pharmacists in chain store pharmacies.

The People Panel Study (Laverty, 1984c) found that over 50% of consumers do not receive voluntary information from their pharmacists. In the group of patients who did not receive a voluntary consultation from their pharmacists, some (20%) asked questions while most of them (30%) did not and, hence, received no information.

Regulations by the Washington State Board of Pharmacy require that pharmacists meet with patients and that they provide information to assist in a better understanding of the medications prescribed. However, Campbell and Grisafe (1975) found that this does not always occur. The investigators used pharmacy students acting undercover who presented a prescription in each of 212 pharmacies. The study found that 81% of the pharmacists met with the patients, but only 47% of the pharmacists explained the directions to the patient. The Schering Study ("Pharmacists exert big influence on buyers of OTC's," 1980) found that 60% of the respondents said that they would not hesitate to discuss any ailment with their pharmacists. That is, the public seems to be eager to receive medication advice and information, but pharmacists are not providing help on a routine basis.

Dickson and Rodowskas (1975c) performed a detailed study of pharmacist communications which controlled for the variables of year of graduation, day of week, time of day, job title, prescription volume, and prescription department staffing. The most significant variable was staffing, in that it varied inversely with total communication time. That is, additional personnel decreased communication time. The authors hypothesized that pharmacists do not efficiently delegate tasks that can be performed by other employees. Therefore, a higher volume pharmacy will have increased staffing, but the pharmacists will be doing more work by themselves. According to the authors, "the pharmacist is envisioned as a prescription producing factory rather than as a health professional providing patient services" (Dickson & Rodowskas, 1975c, p. 497).

Consumer Sources of Help and Information for Self-Medication

An early study by Knapp, Knapp, and Engel (1966) involved in-depth interviews of consumers. The study found that friends and family members were the most relied upon sources of information concerning OTC drugs. Because of their utilization of nonprofessionals for sources of information, many consumers used home remedies. Physicians were frequently questioned but were not contacted for the sole purpose of obtaining information on OTC drugs. This was because of the expense of seeing a physician and because physicians were perceived as being "too authoritarian." Pharmacists were likewise not approached since they were perceived as being "too busy." Pharmacists rarely volunteered information; rather, the patients had to request information from them. Supermarkets were patronized for OTC drugs used for treating "low risk" health problems. Consumers were more influenced by negative stories in the press regarding health care than positive stories. The most important factors influencing their decision-making were brand name and price. The authors concluded that consumers are reasonably sophisticated about drugs but often lack specific information. Consumers' awareness of their deficiencies might explain their reliance on informal communications and their interest in reading health related articles.

A nationwide study was conducted by the Harry Heller Research Corporation for the Proprietary Association in order to determine consumer attitudes, beliefs, and behaviors concerning OTC drugs ("Health care practices and perceptions," 1984). This 1984 nationwide sample of 2000 consumers showed that people have an average of 4.5 health problems per 2 week period and purchase an average of 1.09 products per health problem. Self-treatment is limited to a short duration with only 40% of the consumers continuing treatment beyond one day. Today it seems that people seem to know which problems require professional attention (stomach ulcers and migraine headaches), which problems can be self-treated (athlete's foot and minor headache), and which problems are to be left alone (minor fatigue and bruises). In order to obtain their information, 86% of the consumers in this study read the information on the package, 79% asked the pharmacist, and 72% relied on advertising. Overall, 92% of the consumers surveyed were "satisfied" with the information obtained concerning products they used.

Cohen (1977) has argued that a possible lack of consumer information from health professionals concerning the use of OTC drugs should require that advertising be more strictly regulated. Consumers who rely on advertising for information could be affected by improper advertising that could lead to mistakes in self-medication. She states that OTC drugs are not like other consumer goods where all that a person can lose is money, since if a person incorrectly chooses an OTC drug, he has less money for another OTC drug or for a trip to a physician and a resulting prescription. At present, advertisements fail to disclose risks. Cohen advocates that OTC advertisements be required to state (1) each symptom or condition when a consumer should not use the product; (2) each symptom or condition indicating when a consumer should decrease usage, discontinue the product, or consult a physician; and (3) each ingredient that is habit forming or will result in dependency or continued use.

The Importance of Pharmacist Recommendations

An early study found that patients from lower socioeconomic backgrounds had less tendency to form opinions about OTC drugs and relied more on the pharmacist to recommend a product and provide instructions (Smith, Czaplich, Sohocki, Kamikowski, & McKercher, 1978). The authors observed that patients are more likely to accept advice when they know the pharmacist. One other investigation showed a distinct relationship between confidence in the pharmacist and acceptance of his advice (Riley & Baldwin, 1980). The researchers interviewed 200 people in 13 pharmacies concerning a pharmacist's advice about a toothache remedy. It was concluded that confidence in the pharmacist results from both recognition of professional capability and personal trust. The Schering Study surveyed 1650 consumers and found that 95% purchase the product recommended by the pharmacist, 92% are satisfied with the product, and 87% would purchase it again.

Each year American Druggist conducts an "open call" survey to determine which specific OTC products pharmacists are recommending. Although not statistically valid, the 1983 results, nevertheless, showed that the public is becoming increasingly aware that OTC products differ in degree, and not in kind, from prescription drugs. In addition, the public believes that getting professional advice when purchasing OTC drugs is beneficial to them. The study found that there was a significant increase in consumer requests for information in 1983 over 1982 ("Big rise found in requests by OTC customers for pharmacist recommendations," 1983).

A classic study by Knapp, Wolf, Knapp, and Rudy (1969) indicated that under certain conditions a pharmacist's advice might not be accurate. The authors conducted an undercover survey of 36 pharmacists. The "customer" asked the pharmacist for advice on insulin storage while purchasing an OTC product contraindicated for diabetics. Only 6 out of 36 pharmacists noticed the problem. Thirty out of 36 pharmacists either sold the contraindicated product or else recommended that the "customer" purchase another product that was also contraindicated.

A later study by Wertheimer, Shefter, and Cooper (1973) presented similar findings. Participant observers approached different pharmacists for advice concerning three health conditions. These were a lingering cough for the patient, an unchecked diarrhea for a baby, and a request for quinine capsules as an abortifacient. All 86 pharmacists recommended a specific OTC product for the cough without considering that such a cough may have indicated a serious condition. Not one pharmacist out of 50 inquired as to the baby's weight, duration of symptoms, or the presence of fever. Only 4 out of 31 pharmacists refused to sell the quinine, 22 of the 26 who did sell the quinine failed to label the capsules with directions, and only three pharmacists questioned the use of the quinine but after learning its intended use, nevertheless, dispensed the quinine. The authors concluded that many pharmacists have a casual attitude toward OTC medication and patient care.

Consumer Willingness to Pay for Pharmacy Services

It has been suggested that pharmacists might be more available for patient consultations if patients would be willing to pay for the service. The People Panel Survey ("Payment for services: Don't hold your breath", 1984) contacted 1400 households and asked consumers if they would be willing to pay for the maintenance of patient profiles by pharmacies. Thirty-seven percent said they would. The survey also asked consumers if they would be willing to pay for counseling. Twenty-six percent of the consumers sampled said they would.

Schondelmeyer and Trinca (1983) conducted an experimental study of 218 consumers on their willingness to pay for a prescription consultation. Four groups of consumers were offered the service at four different price levels. Eighty-eight percent of the consumers in the first group used the service at no charge. Twenty-four percent of the consumers in the second group used the service at a $1.00 charge. Thirty-six percent of the consumers in the third group used the service at a $2.00 charge. And, 16.7% of the consumers in the fourth group used the service at a $3.00 charge. It was interesting that more consumers from the $2.00 group were willing to pay than from the $1.00 group.

Kirking (1982) arranged a series of semantic differential scales for his analysis of consumer perceptions of pharmacy services. Where a score of +3 indicated a willingness to pay and -3 indicated an unwillingness to pay, consumers reported an average score of -2.16.

The People Panel Survey ("Payment for services: Don't hold your breath," 1984) found that those consumers who were willing to pay for counseling were better educated and had a greater interest and knowledge regarding health care. Schondelmeyer and Trinca (1983) studied consumers in terms of income, education, age, sex, and race. They found that age was the only significant variable related to willingness to pay. The age group of those most willing to pay was 36-45 while the age group of those least willing to pay was 66-75. The reasons given for willingness were curiosity and a desire for more information.

The above studies were concerned with payments for prescription counseling and the maintenance of patient medication profiles. No studies have been performed concerning the willingness to pay for a pharmacist's consultation when there is a possibility that the pharmacist might recommend an OTC drug or refer the patient to a physician.

Prescribed and Nonprescribed Drug Use

The literature contains studies describing correlates of physician-prescribed drug use; however, there are no studies concerning pharmacist-prescribed drug use. At this time, it is not known if consumers will regard the drugs that pharmacists prescribe as a class of prescription drugs or as a class of OTC drugs. This section examines the correlates of health seeking behavior as they might describe consumers who would utilize a pharmacist's prescribing services. These are physician availability, health status, and demographic characteristics.

Physician Availability

Bush and Osterweis (1978) reasoned that the more people perceive medical care as convenient and available, the more likely they are to use a prescribed drug and less likely to use an OTC drug. These authors found that travel time is not a factor, while cost is. They noted that the use of prescription and nonprescription drugs are two distinct activities. Rabin (1977) and Rabin and Bush (1974) also found the use of nonprescribed drugs to be substitutes for physician visits and for the prescribed medicines associated with the formal health care system. However, it is not known if a health care consumer who perceives that his physician is less available will be more likely to utilize the services of another type of health care professional who is more available.

Health Status

Bush and Osterweis (1978) developed a model of medication use. They showed that low health status (fair to poor health) has a positive effect on both prescribed and nonprescribed drug use. They hypothesized that low health status may necessitate more physician visits, thus resulting in more prescribed drugs. Rabin (1972) also showed that low health status is highly correlated with prescription and nonprescription drug use. Yet it is not known whether persons of low health status will first approach a pharmacist or their regular physician concerning a restricted drug.

Demographic Characteristics

Rabin (1972) found that both OTC and prescription drugs are more likely to be purchased by whites, higher educated individuals, individuals of higher social status, individuals of both high and low incomes, and older individuals. He also found that single member households spend more dollars on OTC drugs and that this value declines with increasing family size. Rabin and Bush (1975a, 1975b) found that whites use more OTC and prescription drugs than nonwhites and that race has an effect on prescribed drug use that is independent of social or ethnic class. Again, it is not known whether persons of such demographic characteristics will first approach a pharmacist or their regular physician concerning a restricted drug.

Summary

Early studies have shown that consumers lack specific information concerning OTC drugs (Knapp, Knapp, & Engel, 1966) while other studies have shown that consumers feel they know all that is necessary in order to make a purchase (Kabat, 1969). Another study showed that only 30% of consumers ever discussed OTC drugs with the pharmacist and

7% did not because they perceived him as being "too busy" (Kabat, 1969). Physicians were likewise not approached because they were perceived as being "too authoritarian" (Knapp, Knapp, & Engel, 1966). Advertising and labeling may not disclose all relevant information (Cohen, 1977).

Today, consumers look for a pharmacist who makes himself available for consultation, will recommend OTC drugs, and discuss how to use them ("Pharmacists exert big influence on buyers of OTC's," 1980). Many consumers mention the presence of a knowledgeable and helpful pharmacist as the main reason for selecting a pharmacy (Laverty, 1984c). In one study, 76% of consumers surveyed indicated that the pharmacist has some influence on their purchase of an OTC product (Laverty, 1984a).

Consumers apparently favor the reclassification of prescription drugs to OTC status. The survey by People Panel indicated that 57% favor reclassification. Younger and better educated consumers are more in favor of reclassification while older and less educated consumers are less in favor (Laverty, 1984a).

Pharmacist prescribing will not be successful unless it has public support. If pharmacists are allowed to prescribe, then, possibly, fewer prescription drugs will be reclassified by the FDA to OTC status. In addition, individual states might elect to restrict the sale of certain OTC drugs to the order of a prescription of a licensed practitioner, including the pharmacist.

The Dichter Study originally focused on pharmacists from independently owned pharmacies. The study attempted to account for the success of chain store and discount pharmacies. Today, it might be expected that a similar effect is taking place with regard to the purchase of OTC drugs. Smith (1983) reasons that today's pharmacists are cool, aloof, and lacking in knowledge regarding the socioeconomic and behavioral aspects of the health professions. That is, pharmacists may not understand the complexities of patient behavior. It might be concluded that if patients do not feel comfortable approaching the pharmacist for advice, then there is no reason for them to request a pharmacist to prescribe. Price and convenience become the important factors. If this is the true state of the pharmacist-patient relationship, then pharmacist prescribing might not be well received.

Research has focused on the correlates of physician-prescribed drug use and the correlates of self-medication. However, it is not known if consumers will regard the drugs that pharmacists prescribe as a class of prescription drugs or as a class of OTC drugs.

CHAPTER IV
METHODOLOGY

Research Design

The research design used for this study was a cross sectional survey method. Consumers were surveyed via telephone in order to assess their attitudes concerning the prescribing law. A telephone survey was chosen over a mail survey for two reasons. First, it was expected that many households would be reached that contained elderly or less literate individuals who might not respond to a mail survey. Second, many individuals from households might be reached in which Spanish, rather than English, is the spoken language.

A computer generated list of 1,600 random telephone numbers was purchased from a marketing information agency, Survey Sampling, Inc., of Westport, Connecticut. The firm has supplied references which support the claim that it has provided such sampling services for many research organizations nationwide. Its samples are fully projectable.

The statistical characteristics of these samples are described by five criteria:

1. The method produces samples in which all telephone households in the geographic sampling frame are given equal probability of selection.
2. The method produces element samples rather than clustered samples.
3. The samples are stratified to all counties such that the number of telephone households drawn from a county is proportional to that county's share of telephone households.
4. Samples are drawn systematically from an array of counties and an array of working telephone blocks within each county.
5. The method employs double sampling with the final sample drawn from the county-stratified first phase sample.

The interviews were conducted over an 8-week period. The study resulted in 402 usable responses.

This section describes the independent and dependent variables, hypothesized relationships, instrumentation, and pilot study with instrument reliability.

Independent and Dependent Variables

The survey measured the following independent variables.

1. Consumer attitude toward physicians.

Attitude toward physicians was operationalized as follows:

    a. The perceived availability of a physician at the time of need.
    b. The perceived access to a physician at the time of need.
    c. The perceived burden of cost of time in visiting a physician.
    d. The perceived burden of monetary cost in visiting a physician.

2. Consumer attitude toward pharmacists.

Attitude toward pharmacists was operationalized as follows:

    a. The perceived availability of a pharmacist at the time of need.
    b. The perceived helpfulness of pharmacists.
    c. The perceived competence of pharmacists.
    d. The presence of a "pharmacist bond."

3. The health status of the consumer.

Health status was operationalized as follows:

A subjective rating from the consumer's personal evaluation on a scale of excellent, good, fair, or poor.

4. Consumer demographic characteristics.

Consumer demographic characteristics were operationalized as follows:

    a. Sex: male and female.

b. Age (actual age of individual, later grouped for analysis into the four categories used by the National Health Care Expenditure Survey): 18-24 years, 25-54 years, 55-64 years, and 65 years and above.

c. Race (five categories used by the U.S. Department of Census): White, Black, Hispanic, American Indian, and Asian.

d. Marital status (five categories used by the U.S. Department of Census): single, married, separated, divorced, and widowed.

e. Household income (five categories that were selected before the data collection began): below $10,000, $10,001-$30,000, $30,001-$50,000, $50,001-$75,000, and over $75,000.

f. Education (12 categories, later grouped for analysis into the five categories used by the U.S. Department of Census): no formal schooling, elementary school, high school, some college, college, and beyond college.

g. Single or multiple member household.

h. If a parent, whether or not dependent children live in the household.

The survey measured the following dependent variables, which describe consumer acceptance of pharmacist prescribing:

1. Consumer approval of the law.
2. Consumer intent to have a pharmacist prescribe for them.

In addition, the study measured two other dependent variables which are related to consumer acceptance of pharmacist prescribing:

3. Consumer choice whether to first consult a pharmacist or a physician for an initial consultation concerning specific health conditions.
4. Consumer willingness to pay a fee for a consultation with a pharmacist concerning drug product selection.
    a. When the pharmacist prescribes an allowable drug.
    b. When the pharmacist recommends an OTC drug.
    c. When the pharmacist recommends that the patient consult a physician.
    d. Consumer willingess to accept pharmacist prescribing if a third party assumes the cost.

The dependent variables were operationalized as follows: simple answers of "yes," "no," or "uncertain" obtained by self-reports of the respondents.

Hypothesized Relationships

The following relationships have support from the literature and were hypothesized:

1. There will be a negative relationship between the perceived availability of a physician at the time of need and consumer acceptance of pharmacist prescribing.
2. There will be a negative relationship between the perceived access to a physician at the time of need and consumer acceptance of pharmacist prescribing.
3. There will be a positive relationship between the perceived burden of monetary cost in visiting a physician and consumer acceptance of pharmacist prescribing.
4. There will be a positive relationship between the perceived availability of a pharmacist at the time of need and consumer acceptance of prescribing.
5. There will be a positive relationship between the perceived helpfulness of pharmacists and consumer acceptance of pharmacist prescribing.
6. There will be a positive relationship between the perceived competence of pharmacists and consumer acceptance of pharmacist prescribing.
7. There will be a positive relationship between the presence of a pharmacist bond and consumer acceptance of pharmacist prescribing.
8. Older consumers will be more likely to accept pharmacist prescribing.

9. White consumers will be more likely to accept pharmacist prescribing.
10. Higher educated consumers will be more likely to accept pharmacist prescribing.
11. Both low and high income consumers rather than middle income consumers will be more likely to accept pharmacist prescribing.
12. Consumers from single member households will be more likely to accept pharmacist prescribing.

The following questions were investigated even though there were no hypotheses as to the nature of the relationship among variables.

1. What is the relationship between the perceived burden of cost of time in visiting a physician and consumer acceptance of pharmacist prescribing?
2. What is the relationship between satisfaction with their physician care and consumer acceptance of pharmacist prescribing?
3. What is the relationship between perceived health status and consumer acceptance of pharmacist prescribing?
4. What is the relationship between sex and consumer acceptance of pharmacist prescribing?
5. What is the relationship between marital status and consumer acceptance of pharmacist prescribing?

6. What is the relationship between the presence or absence of dependent children in the household and consumer acceptance of pharmacist prescribing?
7. Which consumers would be willing to pay a consultation fee for a pharmacist's prescribing service?
8. Which consumers would be willing to take advantage of a pharmacist's prescribing services if a third party would pay for the costs?
9. Which consumers would first consult a pharmacist for specific health conditions?

Instrumentation

Items for the questionnaire were developed with the aid of the theoretical frameworks pertaining to the correlates of prescribed and nonprescribed drug use and with the assistance of pharmacy and marketing professors who are familiar with consumer behavior, health care marketing, and research design. A list containing all possible items was reviewed by the expert judges who then critiqued the wordings, eliminated some statements, and suggested others. The items for the attitude scales were created according to the Likert scaling technique.

The measures of the attitudinal independent variables were determined by scores on a series of 3-point scales. The anchors were (1) agree, (2) no opinion, and (3) disagree. It was decided that a 3-point scale would be relatively simple to administer over the telephone and to a wide variety of respondents. Scores close to "1" were to indicate positive attitudes. Statements worded in the negative were recoded for the item analysis. It was assumed that the response "no opinion" would be equivalent to "neutral" for the purpose of measurement. Therefore, this would create ordinal data that would lend itself to tests of item analysis and Cronbach's alpha.

Pilot Study

The questionnaire was pretested using a sample of 90 telephone numbers in the Gainesville area. The pretest sample was selected from the Gainesville telephone directory. Several listings under each letter of the alphabet were chosen at random.

A total of 50 households answered when called. Of these individuals, 36 agreed to be interviewed, resulting in a response rate of 72%. The overall completion rate is defined here as the total number of completed calls as a percentage of the sampling frame. Here, 36 interviews were obtained from 90 calls, resulting in a completion rate of 40%.

Few changes in the questionnaire were needed. The rate of response was acceptable and no subject showed signs of difficulty in responding to the items. However, the revisions that were made resulted in the addition of items and, therefore, an increase in the length of the survey instrument. The pretest questionnaire appears as

Appendix A. The revised questionnaire appears as Appendix B. The questionnaire also was translated into conversational Spanish so that the study sample would be fully representative of the State of Florida. The Spanish version appears as Appendix C.

Data Collection

This section describes the interviewing process with response rates and final instrument reliability. The unit of analysis is "the consumer over the age of 18 and living in the state of Florida."

Interviewing Process

The respondents were selected from a random sample of residential telephone numbers. The sample size of 400 was calculated for a 95% level of confidence as follows (Kinnear & Taylor, 1983):

$$\text{precision} = \pm 2\sqrt{(p \cdot q/n)}$$

where the precision was chosen to be ±5% and both p and q were chosen to be .5 and .5, reflecting the largest proportions of the sample accepting and not accepting pharmacist prescribing, respectively. The letter n represents the sample size.

The completion rate was defined as the number of completed calls as a percentage of the sampling frame. The balance of the sampling frame is composed of the refusals, terminations, no answers, business listings, nonworking numbers, and continually busy signals. Survey Sampling, Inc. estimated that the completion rate would be approximately 25%. Therefore, a sampling frame of 1,600 telephone numbers was considered to be necessary.

Subjects were telephoned in the manner suggested by Dillman (1978). He mentions that the "socially desirable" times for calling are first, weekday evenings; second, weekend afternoons; third, weekday afternoons; and fourth, weekday mornings. If telephoned in this manner, the number of "not at homes" and "callbacks" can be minimized.

For the purpose of this study, calls were made (1) Mondays through Thursdays, 7:00 PM to 9:00 PM; (2) Mondays through Thursdays, 2:00 PM to 4:00 PM; and (3) Weekends, 2:00 PM to 4:00 PM. Three attempts were made to reach each household. The person answering the telephone was interviewed, if it was determined that the individual was over 18 years of age.

All of the English speaking interviews were performed by the researcher. All of the Spanish speaking interviews were performed by a single paid assistant. When a Spanish speaking household was reached, the researcher made a notation to have the assistant call back in Spanish. No formal measures of inter-rater reliability were performed.

The English interviews were completed over an 8-week period, from September 2, 1986, through October 25, 1986. Approximately 50 interviews were completed each week. The Spanish interviews were completed during the 1-week period of November 9, 1986, through November 15, 1986. They numbered 12 out of a possible 27.

As shown in Table 4-1, of the 1,600 attempts at contacting the various households, there were 756 answers. Four hundred two individuals agreed to be interviewed, resulting in a response rate of 53%. The refusals included the people who refused to be interviewed (327), the terminations by respondents (18), and the hearing impaired (9). The balance of the 1,600 calls resulted in no answers (320), continuously busy (29), disconnected service (360), and business listings (135). The overall completion rate was defined as the number of completed calls as a percentage of the sampling frame. Here, 402 interviews were obtained from 1,600 original telephone numbers, resulting in a completion rate of 25%.

Instrument Reliability

In order to assess the internal consistency of the attitudinal portion of the instrument, an item analysis was performed. This was done even though summated scores were not initially considered for the data analysis. For the purpose of the item analysis, the score for each item was

Table 4-1 Results of the Sampling Frame

Result	Number of Calls	Percent of Total
Completed Calls	402	25.1
No Answer	320	20.0
Busy	29	1.8
Disconnected	360	22.5
Business/Government	135	8.5
Hearing Impaired	9	0.6
Terminations	18	1.1
Refusals	327	20.4
Total	1600	100.0

expected to correlate with the total score on the attitude scale. A minimum value of 0.35 was expected. In addition, a test of Cronbach's alpha was performed. A minimum value of 0.60 was expected. Both types of correlations were observed for a 95% level of confidence.

Table 4-2 shows that 23 of the 34 statements could be grouped into six sets. These were assigned the labels of (1) physician availability (items 16, 17, 18, and 19; alpha = 0.60), (2) physician access (items 32, 33, and 34; alpha = 0.67), (3) monetary cost (items 30, 37, and 38; alpha = 0.65), (4) physician satisfaction (items 23, 24, 25, 26, 28, and 29; alpha = 0.80), (5) pharmacist helpfulness (items 39, 42, and 43; alpha = .63), and (6) pharmacist bond (items 46, 47, 48, and 49; alpha = 0.91).

Eleven of the attitudinal statements could not be grouped with any others, either logically, or because of a loss in the correlations. These were items intended to measure (1) physician availability (item 21), (2) physician access (item 20), (3) monetary cost (items 31 and 36), (4) physician satisfaction (item 27), (5) time cost (items 22 and 35), (6) pharmacist availability (items 40 and 41), and (7) pharmacist competence (items 44 and 45).

For the most part, the items appeared to be internally consistent and relatively homogeneous. However, only six scales could be formed with two-thirds of the items.

Table 4-2 Item Analysis for the Attitude Dimensions of the Survey

Scale	Item #	Item Total Correlation	Alpha if Item Deleted	Number of Cases	Alpha
Physician Availability	16	.35	.57	401*	.60
	17	.41	.51		
	18	.43	.49		
	19	.36	.54		
Physician Access	32	.35	.72	401*	.67
	33	.60	.40		
	34	.53	.51		
Monetary Cost	30	.32	.74	315*	.65
	37	.52	.46		
	38	.56	.43		
Physician Satisfaction	23	.62	.75	401*	.80
	24	.65	.74		
	25	.57	.76		
	26	.57	.76		
	28	.48	.78		
	29	.45	.79		
Pharmacist Helpfulness	39	.42	.55	321*	.63
	42	.47	.48		
	43	.43	.54		
Pharmacist Bond	46	.82	.88	300*	.91
	47	.84	.87		
	48	.76	.90		
	49	.79	.89		

* Number of cases responding to all questions relating to a specific area of interest.

CHAPTER V
RESULTS

This section presents the descriptive and statistical analyses of the survey findings under five general headings. First, the geographical distribution of the respondents was compared with that of the state population. Second, the demographic characteristics of the respondents are presented; they were likewise compared with the population estimates. Third, the responses for each item of the questionnaire were analyzed descriptively with frequencies and percentages. Fourth, the hypotheses were tested for statistical support. Fifth, the investigated relationships were analyzed for statistical support.

Location of Respondents

The survey sample includes respondents from 50 of Florida's 67 counties. Dade County has the highest percentage of representation (47 or 11.8%), followed by Broward County (38 or 9.5%). Seventeen counties were not represented in the survey. This may be because these counties have such small populations, that the "no answers" when added to the "nonresponses" eliminated them completely from the study. Table 5-1 shows a breakdown of the respondents in terms of county location. The table includes the 17 nonrepresented counties. Table 5-1 also compares the distribution of the respondents with the distribution of the general population as provided by the University of Florida Bureau of Economic Research (Florida Estimates of Population, 1986) and with the data provided by Survey Sampling, Inc. The survey sample is reasonably consistent with the 1985 estimates of population and with the original frame supplied by Survey Sampling, Inc.

Description of Respondents

In summary, the respondents were primarily female (266 or 66.3%), were mainly white (353 or 87.8%), mainly married (244 or 60.8%), and had annual household incomes between $10,000 and $30,000 (172 or 45.6%). The respondents ranged in age from 18 to 90 (mean of 47.4) and the highest percentage of educational attainment appeared in the high school category (151 or 38.0%). The majority did not have dependent children in the household (282 or 70.5%).

Table 5-2 shows the demographic characteristics of the respondents. The table also shows a comparison with demographic estimates for 1987 provided by the Florida State Data Center. However, the Center was only able to provide estimates for three demographic characteristics,

Table 5-1 Counties Surveyed

County	Frequency	Sample %	Survey Estimate %*	Population Estimate %**
Alachua	9	2.3	1.4	1.5
Baker	0	0.0	0.1	0.1
Bay	5	1.3	0.9	1.0
Bradford	1	0.3	0.1	0.2
Brevard	14	3.5	3.1	3.0
Broward	38	9.5	11.3	9.9
Calhoun	1	0.3	0.1	0.1
Charlotte	4	1.0	0.8	0.7
Citrus	1	0.3	0.7	0.6
Clay	4	1.0	0.6	0.7
Collier	1	0.3	1.0	1.0
Columbia	1	0.3	0.3	0.3
Dade	47	11.8	14.9	15.6
Dixie	0	0.0	0.1	0.1
De Soto	0	0.0	0.1	0.2
Duval	28	7.0	5.1	5.5
Escambia	15	3.8	2.1	2.3
Flagler	0	0.0	0.1	0.1
Franklin	0	0.0	0.1	0.1
Gadsden	3	0.8	0.3	0.4
Gilchrist	1	0.3	0.1	0.1
Glades	0	0.0	0.1	0.1
Gulf	1	0.3	0.1	0.1
Hamilton	0	0.0	0.1	0.1
Hardee	0	0.0	0.1	0.1
Hendry	2	0.5	0.1	0.2
Hernando	2	0.5	0.6	0.6
Highlands	0	0.0	0.5	0.5
Hillsborough	23	5.8	6.1	6.7
Holmes	1	0.3	0.1	0.1
Indian River	4	1.0	0.7	0.7
Jackson	2	0.5	0.3	0.4
Jefferson	0	0.0	0.1	0.1
Lafayette	0	0.0	0.1	0.1
Lake	6	1.5	1.1	1.1
Lee	6	1.5	2.4	2.3
Leon	6	1.5	1.4	1.5
Levy	1	0.3	0.2	0.2
Liberty	0	0.0	0.0	0.1
Madison	0	0.0	0.1	0.1
Manatee	5	1.3	1.7	1.5
Marion	8	2.0	1.3	1.4

Table 5-1--continued.

County	Frequency	Sample %	Survey Estimate %*	Population Estimate %**
Martin	2	0.5	0.8	0.7
Monroe	2	0.5	0.6	0.6
Nassau	1	0.3	0.3	0.3
Okaloosa	2	0.5	1.0	1.2
Okeechobee	1	0.3	0.2	0.2
Orange	17	4.3	4.6	4.9
Osceola	4	1.0	0.6	0.7
Palm Beach	19	4.8	7.0	6.3
Pasco	7	1.8	2.4	2.1
Pinellas	37	9.3	8.4	7.1
Polk	17	4.3	2.9	3.2
Putnam	1	0.3	0.5	0.5
Santa Rosa	2	0.5	0.6	0.6
Sarasota	12	3.0	2.6	2.1
Seminole	10	2.5	1.9	2.0
St. Johns	1	0.3	0.5	0.6
St. Lucie	4	1.0	0.9	1.0
Sumpter	2	0.5	0.3	0.2
Suwannee	0	0.0	0.2	0.2
Taylor	0	0.0	0.1	0.1
Union	0	0.0	0.1	0.1
Volusia	15	3.8	2.6	3.4
Wakulla	0	0.0	0.1	0.1
Walton	1	0.3	0.2	0.2
Washington	1	0.3	0.1	0.1
Total	398***	100.0	100.0	100.0

* Data provided by Survey Sampling, Inc.

** Data provided by "Florida Estimates of Population 1986," Bureau of Business and Economic Research, University of Florida.

*** The codes for four counties were incorrectly recorded.

Table 5-2 Demographic Characteristics of the Respondents

Characteristic	Survey Sample		Population Estimate*	
	#	%		%
Sex				
Male	135	33.7		47.3
Female	266	66.3		52.7
	401**	100.0		100.0
Age				
18-24	54	13.5		12.9
25-54	191	47.8		48.4
55-64	58	14.5		14.1
Over 64	97	24.2		24.6
	400**	100.0		100.0
Race				
White	353	87.8	Nonblack	88.6
Black	32	8.0	Black	11.4
Hispanic	17	4.2		
	402	100.0		100.0
Marital Status				
Single	90	22.4		
Married	244	60.8		
Divorced	20	5.0		
Widowed	47	11.7		
	401**	100.0		
Income				
Under $10,000	91	24.1		
$10,001-$30,000	172	45.6		
$30,001-$50,000	91	24.1		
$50,001-$75,000	13	3.4		
Over $75,000	10	2.7		
	377**	100.0		

Table 5-2--continued.

Characteristic	Survey Sample #	Survey Sample %	Population Estimate* %
Education			
None	2	0.5	
Some Elementary	7	1.8	
Elementary	9	2.3	
Some High School	26	6.5	
High School	151	38.0	
Some College	111	28.0	
College	65	16.4	
Some Graduate Work	8	2.0	
Master Degree	13	3.3	
Doctoral Degree	5	1.2	
Medical Degree	0	-	
Law Degree	0	-	
	397**	100.0	
Children at Home			
Yes	118	29.5	
No	282	70.5	
	400**	100.0	

* Population Estimate for 1987 provided by Florida State Data Center, Office of Planning and Budgeting, Executive Office of the Governor, The Capitol, Tallahassee, FL. The center was able to supply estimates of only three demographic characteristics. As presented here, they describe individuals aged 18 years and over.

** Does not indicate the expected total of 402 due to item nonresponse.

sex, age, and race. The consumers interviewed for this study provided demographic characteristics that were reasonably consistent with the estimates for the state for 1987.

Descriptive Statistics

This section presents a description of the survey results. Frequencies and percentages are reported. Not all individuals responded to all items. Such item nonresponse occurred when the item did not pertain to a certain individual or when an individual refused to respond or could not respond to the item.

Pharmacy Patronage

As seen in Table 5-3, 317 (78.9%) of all respondents reported having one particular pharmacy where they trade most of the time. For most of these people, it was a chain type store (212 or 66.8%). Their length of time trading at the same pharmacy ranged from 1 year to 20 or more years with a mean of 7.3 years. The largest category was 2 years (45 or 14.2%), followed by 10 years (42 or 13.2%), then 5 years (41 or 12.9%). Interestingly, most respondents did not know the name of the pharmacist who usually assists them (226 or 71.5%). A total of 324 (80.6%) of the respondents reported that they pay for their own prescriptions. Of this group, 126 (39.0%) reported that

Table 5-3 Survey Results Concerning General Pharmacy Patronage

	Response	Frequency	Percent
Consumers Indicating a Regular Pharmacy	Yes	317	78.9
	No	85	21.1
	Total	402	100.0
Pharmacy Type	Chain	212	66.8
	Independent	83	26.2
	HMP PPO	6	1.9
	Clinic	16	5.0
	Total	317	100.0
Number of Years Trading with that Pharmacy	1	34	10.7
	2	45	14.2
	3	31	9.8
	4	13	4.1
	5	41	12.9
	6	22	6.9
	7	13	4.1
	8	13	4.1
	9	6	1.9
	10	42	13.2
	11	1	0.3
	12	6	1.9
	13	3	0.9
	14	3	0.9
	15	18	5.7
	16	1	0.0
	17	5	1.6
	18	2	0.6
	19	1	0.0
	20 or more	19	5.8
	Total	317	100.0
Consumers Who Know the Name of Their Pharmacist	Yes	90	28.5
	No	226	71.5
	Total	316*	100.0

Table 5-3--continued.

	Response	Frequency	Percent
How Consumers Pay for Prescriptions	Self	324	80.6
	Private Third Party	59	14.7
	Federal or State Aid	18	4.5
	Other	1	0.2
	Total	402	100.0
If Reimbursed	Yes	126	39.0
	No	197	61.0
	Total	323**	100.0
If a Copay	Yes	116	92.1
	No	10	7.9
	Total	126	100.0

* Does not indicate the expected total of 317 due to item nonresponse.

** Does not indicate the expected total of 324 due to item nonresponse.

they are reimbursed by an insurance company for all or part of their prescription expenses.

Physician Use

Questions were asked concerning physician use which were similar to those regarding pharmacist use. As seen in Table 5-4, of all respondents, 352 (87.8%) reported having a regular physician available when they are ill. For most of these people (206 or 58.7%), this physician was a solo practitioner in private practice. The time period of the relationship with their current physician ranged from 1 year to 10 or more years with a mean of 8.1 years. They were not asked if they knew the name of their physician. A total of 315 (78.4%) respondents reported that they pay for their own physician visits and 202 (64.3%) of these respondents reported that they are reimbursed for all or part of their physician expenses. The respondents were asked to report the number of times they visited a physician in the last year. Their answers ranged from 0 visit to 20 or more visits with a mean of 4.4 visits. The most frequent response was one visit (19.9%) followed by none (16.2%) and, then, two visits (14.9%). Most (314 or 78.1%) indicated they had made five or less visits while a sizeable number of respondents (39 or 9.7%) indicated 10-12 visits. In the former case, the respondents mentioned that they consulted a physician only in time of need or for a

Table 5-4 Survey Results Concerning Physician Utilization

	Response	Frequency	Percent
Consumers Indicating a Regular Physician	Yes	352	87.8
	No	49	12.2
	Total	401*	100.0
Physician Practice	Private Solo	206	58.7
	HMO PPO	17	4.8
	Group	70	19.9
	Clinic	46	13.1
	Doc in the Box	7	2.0
	Not Sure	5	1.4
	Total	351**	100.0
Number of Years Seeing Physician	1	38	10.9
	2	39	11.1
	3	37	10.6
	4	25	7.1
	5	38	10.9
	6	18	5.1
	7	17	4.9
	8	13	3.7
	9	2	0.6
	10	42	12.0
	11	1	0.3
	12	10	2.9
	13	4	1.1
	14	3	0.9
	15	19	5.4
	16	3	0.9
	17	2	0.6
	18	4	1.1
	19	0	0
	20 or more	35	10.1
	Total	350*	100.0
How Consumers Pay for Physician Visits	Self	315	78.4
	Private Third Party	50	12.4
	Federal or State	29	7.2
	Other	8	2.0
	Total	402	100.0

Table 5-4--continued.

	Response	Frequency	Percent
If Reimbursed	Yes	202	64.3
	No	112	35.7
	Total	314***	100.0
If a Copay	Yes	196	97.5
	No	5	2.5
	Total	201****	100.0
Physician Visits in Last Year	0	65	16.2
	1	80	19.9
	2	60	14.9
	3	53	13.2
	4	41	10.2
	5	15	3.7
	6	24	6.0
	7	2	0.5
	8	3	0.7
	9	1	0.2
	10	10	2.5
	11	0	0.0
	12	29	7.2
	13	0	0.0
	14	0	0.0
	15	3	0.7
	16	1	0.2
	17	0	0.0
	18	0	0.0
	19	0	0.0
	20 or more	15	3.5
	Total	402	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

** Does not indicate the expected total of 352 due to item nonresponse.

*** Does not indicate the expected total of 315 due to item nonresponse.

**** Does not indicate the expected total of 202 due to item nonresponse.

yearly check-up. In the latter case, the respondents mentioned that they have specific conditions which necessitate a visit to a physician at least once a month. Some of these people were either hospitalized and/or maternity patients.

Attitudes

As previously discussed, several statements were presented and the respondents were asked to report whether they agree, disagree, or have no opinion. These statements were constructed to elicit the various attitudes the respondents may have in regard to pharmacists and physicians. Responses to these attitudinal statements were used for hypothesis testing. In addition, the descriptive statistics presented here provide an interesting overview of consumer attitudes in general.

The statements were constructed so that the respondent could be interviewed whether or not he had a "regular doctor." This term was presented to the respondents earlier in the survey in such a manner that it was self-defining as "a customary or established physician." If the respondent earlier reported that he, indeed, had a "regular doctor," then the statement was phrased in the particular case, ". . . my doctor. . . ." Otherwise, if the respondent had reported that he did not have a "regular doctor," then the statement was phrased in the general sense, ". . .most doctors . . ." or ". . .a doctor. . . ." The same technique was employed for the statements measuring attitudes toward pharmacists. It was recognized in advance that many respondents would not have "regular doctors" or "regular pharmacists." In this manner, the global attitudes for all health care consumers could be recorded.

Physician Availability

There were five statements measuring consumers' perceptions of physician availability, items 16, 17, 18, 19, and 21. These were presented to all respondents. However, the test of Cronbach's alpha indicated that one statement, item 21, did not group with the others regarding physician availability and that it might have been measuring a slightly different construct.

As seen in Table 5-5, consumers generally consider their physicians to be available when needed. A majority of the respondents (352 or 87.8%) reported that they can get an appointment with a physician in 2 or 3 days, while a smaller number (207 or 51.6%) reported that they can see a physician without an appointment. Most respondents (277 or 69.1%) reported that their physician will talk to them over the telephone, while fewer (189 or 47.1%) reported that their physician is available after office hours, if needed. Only 58 respondents (14.5%) reported that their physician does not like to be troubled unless it is really necessary.

Table 5-5 Consumer Reactions to Physician Availability

Item No.	Statement	Agree	No Opinion	Disagree	Total
16	I can get an appointment with my doctor (a doctor) 2 or 3 days.	352 (87.8%)	10 (2.5%)	39 (9.7%)	401*(100%)
17	I usually can see my doctor (a doctor) without an appointment.	207 (51.6%)	43 (10.7%)	151 (37.7%)	401*(100%)
18	My doctor is (most doctors are) available after office hours, evenings and weekends.	189 (47.1%)	82 (20.4%)	130 (32.5%)	401*(100%)
19	My doctor (most doctors) will talk to me over the phone when I call.	277 (69.1%)	47 (11.7%)	77 (19.2%)	401*(100%)
21	My doctor doesn't like to be troubled unless it is really necessary.	58 (14.5%)	62 (15.5%)	281 (70.0%)	401*(100%)

* Does not indicate the expected total of 402 due to item nonresponse.

Physician Access

There were four statements measuring consumers' perceptions of access to a physician, items 20, 32, 33, and 34. These were presented to all respondents. However, the test of Cronbach's alpha indicated that one statement, item 20, did not group with the others regarding consumer access to a physician and that it might have been measuring a slightly different construct.

As seen in Table 5-6, access to a physician does not seem to be a problem for most consumers. A total of 348 (86.8%) respondents reported that their physician's office is conveniently located for them, while only 61 (15.2%) reported that they have to travel over 30 minutes each way in order to see him. A majority (362 or 90.3%) reported that getting transportation to the office is no problem, while only 25 (6.2%) reported that transportation is too expensive for them.

Monetary Cost

There were five statements measuring consumers' monetary cost of visiting a physician, items 30, 31,36, 37, and 38. These statements were presented only to those respondents indicating that they pay for their own physician visits and/or prescription costs. The test of Cronbach's alpha indicated that two statements, items 31 and 36, did not group with the others regarding monetary

Table 5-6 Consumer Reaction to Physician Access

Item No.	Statement	Agree	No Opinion	Disagree	Total
20	Getting transportation to my doctor's office can be a problem for me.	38 (9.5%)	1 (0.2%)	362 (90.3%)	401*(100%)
32	Transportation to my doctor's (a doctor's) office costs me too much.	25 (6.2%)	6 (1.5%)	370 (92.3%)	401*(100%)
33	My doctor's (a doctor's) office is conveniently located.	348 (86.8%)	5 (1.2%)	48 (12.0%)	401*(100%)
34	I have to travel over 30 minutes each way in order to see my doctor (a doctor).	61 (15.2%)	5 (1.2%)	335 (83.6%)	401*(100%)

* Does not indicate the expected total of 402 due to item nonresponse.

cost and that they might have been measuring slightly different constructs.

As noted in Table 5-7, the monetary cost of visiting a physician does not seem to be a problem with most consumers. Only 90 (28.6%) of the 315 respondents who pay for their own physicians' visits feel that these costs are too expensive for them, but 237 (75.2%) reported that their physicians' fees are reasonable. Most (250 or 79.3%) of these respondents reported that they do not have to pay their physician a separate fee for each time they contact him. Furthermore, 222 (69.2) of the 321 respondents who pay for their own prescriptions are not in fear of receiving a costly prescription. A majority (319 or 79.6%) of all respondents reported that they do not have to lose pay from work in order to visit a physician.

Time Cost

There were two statements measuring consumers' cost of time in visiting a physician, items 22 and 35. These were presented to each respondent. However, the test of Cronbach's alpha indicated that they did not group together and that they might have been measuring slightly different constructs.

As shown in Table 5-8, most consumers do not seem to be too inconvenienced concerning the time required to visit a physician. Only 135 (33.7%) respondents reported that they have to wait too long in the office, while 272 (68.0%)

Table 5-7 Consumer Reactions to Monetary Cost

Item No.	Statement	Agree	No Opinion	Disagree	Total
30	I am afraid that the medicine my doctor prescribes (most doctors prescribe) will be too expensive for me.	89 (27.7%)	10 (3.1%)	222 (69.2%)	321* (100%)
31	I have to lose pay when I take time off from work in order to see my doctor (a doctor).	76 (19.0%)	6 (1.5%)	319 (79.6%)	401** (100%)
36	I have to pay my doctor a separate fee for each time I contact him, even if it's only for a phone call.	50 (15.9%)	15 (4.8%)	250 (79.3%)	315***(100%)
37	My doctor's (most doctor's) visits are too expensive for me.	90 (28.6%)	11 (3.5%)	214 (67.9%)	315***(100%)
38	My doctor's (most doctor's) fees are reasonable.	237 (75.2%)	10 (3.2%)	68 (21.6%)	315***(100%)

* Only asked of those respondents who reported that they pay for their own prescriptions. Does not indicate the expected total of 324 due to item nonresponse.

** Does not indicate the expected total of 402 due to item nonresponse.

*** Only asked of those respondents who reported that they pay for their own physician visits.

Table 5-8 Consumer Reactions to Time Cost

Item No.	Statement	Agree	No Opinion	Disagree	Total
22	I have to wait too long in the office when I go to see my doctor.	135 (33.7%)	6 (1.5%)	260 (64.8%)	401*(100%)
35	I don't mind waiting as long as 30 minutes when I go to see my doctor.	272 (68.0%)	11 (2.7%)	117 (29.3%)	400*(100%)

* Does not indicate the expected total of 402 due to item nonresponse.

respondents reported that they do not mind waiting up to 30 minutes in order to see a physician.

Consumer Satisfaction with Physicians

There were seven statements measuring consumers' satisfaction with their physicians, items 23, 24, 25, 26, 27, 28, and 29. These were presented to all respondents. However, the test of Cronbach's alpha indicated that one statement, item 27, did not group with the others regarding consumers' satisfaction with physicians and that it might have been measuring a slightly different construct.

As shown in Table 5-9, most consumers seem to be reasonably satisfied with their present level of physician care. A majority (350 or 87.3%) of the respondents reported that they are satisfied with the amount of time their physician spends with them. A majority (333 or 83.1%) also reported that their physician will spend extra time with them when they need it. The largest number of respondents (365 or 91.0%) reported that their physician always lets them finish telling him about their problem and 339 (84.5%) disagreed that their physician seems to be rushing them. Another 362 (90.3%) respondents reported that their physician always explains their condition while fewer (293 or 73.1%) respondents reported that their physician will tell them frankly if he does not know what their trouble is. Interestingly, 115 (28.7%) respondents

Table 5-9 Consumer Reactions to Satisfaction with Physicians

Item No.	Statement	Agree	No Opinion	Disagree	Total
23	I am satisfied with the amount of time that my doctor spends (most doctors spend) with me.	350 (87.3%)	11 (2.7%)	40 (10.0%)	401*(100%)
24	My doctor seems (most doctors seem) to be rushing me when he talks (they talk) to me.	52 (13.0%)	10 (2.5%)	339 (84.5%)	401*(100%)
25	My doctor spends (most doctors spend) extra time with me when I need it.	333 (83.1%)	29 (7.2%)	39 (9.7%)	401*(100%)
26	My doctor always lets (most doctors always let) me finish telling him (them) about my condition.	365 (91.0%)	12 (3.0%)	24 (6.0%)	401*(100%)
27	My doctor uses terms I don't understand.	115 (28.7%)	8 (2.0%)	278 (69.3%)	401*(100%)
28	My doctor always explains (most doctors always explain) my condition to me.	362 (90.3%)	9 (2.2%)	30 (7.5%)	401*(100%)
29	My doctor (most doctors) will tell me frankly if he doesn't (they don't) known what my problem is.	293 (73.1%)	60 (15.0%)	48 (12.0%)	401*(100%)

* Does not indicate the expected total of 402 due to item nonresponse.

reported that their physician uses terms they do not understand.

Pharmacist Availability

There were two statements intended to measure consumers' perceptions of pharmacist availability, items 40 and 41. These were presented to all respondents. Yet, the test of Cronbach's alpha indicated that they did not group with each other and that they might have been measuring slightly different constructs.

As revealed in Table 5-10, most consumers are of the opinion that pharmacists are generally available and approachable. A majority (244 or 60.7%) of all respondents reported that they usually can converse directly with the pharmacist as opposed to communicating with him through a drug clerk. Another 256 (63.7%) reported that pharmacists will readily talk to them over the telephone if needed.

Pharmacist Helpfulness

There were three statements measuring consumers' perceptions of pharmacist helpfulness, items 39, 42, and 43. The first two statements were presented to all respondents. The third was presented only to those respondents indicating that they pay for their own prescriptions.

As seen in Table 5-11, respondents generally feel that pharmacists are helpful. A majority (321 or 79.9%) of all respondents reported that they feel comfortable in asking a

Table 5-10 Consumer Reactions to Pharmacist Availability

Item No.	Statement	Agree	No Opinion	Disagree	Total
40	My pharmacist doesn't (most pharmacists don't) talk to me directly when I'm in the pharmacy, but usually relates (relate) information through the drug clerk.	114 (28.4%)	44 (10.9%)	244 (60.7%)	402 (100%)
41	My pharmacist (most pharmacists) will talk to me over the phone when I call.	256 (63.7%)	106 (26.4%)	40 (9.9%)	402 (100%)

Table 5-11 Consumer Reaction to Pharmacist Helpfulness

Item No.	Statement	Agree	No Opinion	Disagree	Total
39	I feel comfortable in asking my pharmacist (a pharmacist) for advice or information.	321 (79.9%)	37 (9.2%)	44 (10.9%)	402 (100%)
42	My pharmacist shows (most pharmacists show) a personal concern for my health.	263 (65.4%)	80 (19.9%)	59 (14.7%)	402 (100%)
43	My pharmacist tries (most pharmacists try) to save me money on prescriptions.	239 (74.5%)	37 (11.5%)	45 (14.0%)	321*(100%)

* Only asked of those respondents who reported that they pay for their own prescriptions. Does not indicate the expected total of 324 due to item nonresponse.

pharmacist for advice or information. A smaller number (263 or 65.4%) reported that they feel pharmacists show a personal concern for their health, and 239 (74.5%) of the 321 respondents who pay for their own prescriptions believe that pharmacists try to save them money on their prescriptions.

Trust in Pharmacist Competence

There were two statements intended to measure consumers' perceptions of pharmacist competence, items 44 and 45. These were presented to all respondents. However, the test of Cronbach's alpha indicated that they did not group with each other and that they might have been measuring slightly different constructs.

Table 5-12 shows that consumers generally consider pharmacists to be competent. Most (330 or 82.1%) respondents reported that they trust the recommendations and advice they receive from pharmacists while less than one-third (126 or 31.5%) of the respondents indicated that they would like to get a second opinion.

Pharmacist Bond

There were four statements measuring a patient-pharmacist bond, items 46, 47, 48, and 49. These statements were presented only to those respondents answering "yes" to the screening question, "Do you have one pharmacy in particular where you trade most of the time?".

Table 5-12 Consumer Reactions to Trust in Pharmacist Competence

Item No.	Statement	Agree	No Opinion	Disagree	Total
44	I trust my pharmacist's (most pharmacists') recommendations and advice.	330 (82.1%)	46 (11.4%)	26 (6.5%)	402 (100%)
45	I like to get another professional opinion in addition to what my pharmacist (a pharmacist) tells me.	126 (31.5%)	67 (16.8%)	207 (51.8%)	400*(100%)

* Does not indicate the expected total of 402 due to item nonresponse.

As indicated in Table 5-13, almost half (148 or 49.0%) of respondents reported that their pharmacist knows them by name. However, the same number (148 or 49.3%) of respondents reported that their pharmacist does not usually call them by name. Almost as many (144 or 48.0%) respondents reported that their pharmacist will not usually stop work in order to talk to them; yet, many (138 or 46.0%) respondents feel that they can confide in their pharmacist.

Of the approximately 300 respondents who answered each of the above statements, about half indicated agreement with each statement. This indicates that about as many consumers have a "pharmacist bond" as those who do not.

Views of Pharmacist Prescribing

As seen in Table 5-14, a majority of the respondents feel that pharmacists are qualified to prescribe drugs (234 or 58.5%). The same number of respondents had already heard about the new law (234 or 58.2%). Most had learned about it through a local newspaper report (104 or 45%) or a local television report (72 or 31.2%). In contrast, only 4 (1.7%) of the respondents who had heard about the new law reported that they had learned about it from a pharmacist. Two (0.9%) respondents had learned about the law from physicians, while 11 (4.8%) had learned about it from some other health care professional.

Table 5-13 Consumer Reactions to the Presence of a Pharmacist Bond

Item No.	Statement	Agree	No Opinion	Disagree	Total
46	My pharmacist knows me by name.	148 (49.0%)	14 (4.6%)	140 (46.4%)	302*(100%)
47	My pharmacist usually calls me by name when he sees me.	139 (46.3%)	13 (4.3%)	148 (49.3%)	300*(100%)
48	My pharmacist usually will stop what he is doing in order to talk to me.	131 (43.7%)	25 (8.3%)	144 (48.0%)	300*(100%)
49	I can confide in my pharmacist.	138 (46.0%)	31 (10.3%)	131 (43.7%)	300*(100%)

* Only asked of those respondents who reported that they trade with one particular pharmacy. Does not indicate the expected total of 317 due to item nonresponse.

Table 5-14 Consumer Awareness of the Law

	Response	Frequency	Percent
Consumer Feelings if Pharmacists are Qualified to Prescribe	Yes	234	58.5
	No	110	27.5
	Uncertain	56	14.0
	Total	400*	100.0
Consumers Who Are Aware of the Law	Yes	234	58.2
	No	168	41.8
	Total	402	100.0
Where Consumers First Learned of the Law	National Newspaper	2	0.9
	Local Newspaper	104	45.0
	Local Radio	2	0.9
	National TV	9	3.9
	Local TV	72	31.2
	Physician	2	0.9
	Pharmacist	4	1.7
	Other Health Professional	11	4.8
	Friend or Relative	11	4.8
	Not Sure or Cannot Recall	14	6.1
	Total	231**	100.0
If Consumers Consider Themselves to Be Well Informed About the Law	Yes	78	33.8
	No	153	66.2
	Total	231**	100.0
If Consumers Believe Pharmacists Are Allowed to Prescribe for a Large or Small Variety of Conditions	Large	7	9.1
	Small	67	87.0
	Uncertain	3	3.9
	Total	77***	100.0
Long Term or Short Term Therapy	Long Term	3	3.9
	Short Term	60	77.9
	Both	8	10.4
	Uncertain	5	7.8
	Total	77***	100.0

Table 5-14--continued.

* Does not indicate the expected total of 402 due to item nonresponse.

** Does not indicate the expected total of 234 due to item nonresponse.

*** Does not indicate the expected total of 78 due to item nonresponse.

Of those who were aware of the law, only 78 (33.8%) considered themselves to be well informed about what pharmacists are allowed to do under the new law. Most of these 78 respondents correctly answered that pharmacists are allowed to prescribe for only a small variety of health ailments (67 or 87.0%) which involve short term therapy (60 or 77.9%).

Ten different health ailments (representing various degrees of seriousness) were presented to those respondents who considered themselves to be well informed. The respondents were asked if they believed that pharmacists are allowed to prescribe for such conditions. As seen in Table 5-15, a majority of the respondents who replied gave the correct answer for each health ailment.

Only five respondents who were aware of the law had actually asked their pharmacist to prescribe. Two had asked twice and three had asked once each. The pharmacist prescribed once for each of two respondents and twice for one respondent. The pharmacist recommended an OTC product twice for one respondent and recommended that another respondent consult a physician. Four respondents reported that they were very satisfied with the results. One respondent reported that she was very dissatisfied. She had asked the pharmacist to prescribe Kwell Shampoo but this pharmacist had chosen not to prescribe and instead

Table 5-15 Consumer Knowledge of the Law

Consumers that Believe Pharmacists are Allowed to Prescribe	Response	Frequency	Percent
Drugs for Injection	Yes	4	6.1
	No	50	75.8
	Uncertain	12	18.2
	Total	66*	100.0
Drugs for Colds and Allergies	Yes	61	92.4
	No	5	7.6
	Total	66*	100.0
Drugs for Pin Worms	Yes	47	71.2
	No	5	7.6
	Uncertain	14	21.2
	Total	66*	100.0
Drugs for High Blood Pressure	Yes	12	18.2
	No	47	71.2
	Uncertain	7	10.6
	Total	66*	100.0
Drugs for General Aches and Pains	Yes	63	95.5
	No	3	4.5
	Total	66*	100.0
Drugs for Diabetes	Yes	8	12.1
	No	53	80.3
	Uncertain	5	7.6
	Total	66*	100.0
Drugs for Head Lice	Yes	62	93.9
	No	3	4.5
	Uncertain	1	1.5
	Total	66*	100.0
Drugs for Corns and Warts	Yes	63	95.5
	No	2	3.0
	Uncertain	1	1.5
	Total	66*	100.0
Drugs for Internal Infections	Yes	5	7.6
	No	58	87.9
	Uncertain	3	4.5
	Total	66*	100.0

Table 5-15--continued.

Consumers that Believe Pharmacists are Allowed to Prescribe	Response	Frequency	Percent
Drugs for Skin Rashes	Yes	57	86.4
	No	8	12.1
	Uncertain	1	1.5
	Total	66*	100.0

* Does not indicate the expected total of 78 due to item nonresponse.

referred the patient to a physician. No fees were charged in any of the seven instances.

All respondents were presented 12 medical conditions for which pharmacists are permitted to prescribe. The respondents were asked if they would first consult a pharmacist or a physician if they believed that they had one of the conditions. Table 5-16 lists these conditions in descending order of preference to the pharmacist. The frequencies and percentages of the responses are also listed. Head lice is at the top of the list with 213 (53.7%) respondents reporting that they would consult a pharmacist for this condition. Next was corns and warts (203 or 51.1%), followed by fluoride vitamins (195 or 49.0%). The three conditions for which respondents reported that they would be least likely to consult a pharmacist were pinworms (108 or 27.3%), nausea and vomiting (81 or 20.4%), and burning urination (29 or 7.3%).

All respondents were then asked if, considering the above list of conditions for which pharmacists are allowed to prescribe, they feel that the law is "okay as it stands," or would they give the pharmacist greater or less authority to prescribe. As seen in Table 5-17, almost half (178 or 44.7%) considered the law to be "okay as it stands." Another 69 (17.4%) would give the pharmacist greater authority, 84 (21.1%) would give the pharmacist

Table 5-16 The Conditions for Which Consumers Would First Consult a Pharmacist

	Response	Frequency	Percent
Head Lice	Pharmacist	213	53.7
	Doctor	140	35.3
	Neither	44	11.1
	Total	397*	100.0
Corns and Warts	Pharmacist	203	51.1
	Doctor	152	38.3
	Neither	42	10.6
	Total	397*	100.0
Fluoride Vitamins	Pharmacist	195	49.0
	Doctor	148	37.2
	Neither	55	13.8
	Total	397*	100.0
Allergies	Pharmacist	186	46.9
	Doctor	174	43.8
	Neither	37	9.3
	Total	397*	100.0
General Aches and Pains	Pharmacist	179	45.0
	Doctor	175	44.0
	Neither	44	11.0
	Total	398*	100.0
Earache	Pharmacist	151	37.9
	Doctor	224	56.3
	Neither	23	5.8
	Total	398*	100.0
Hemorrhoids	Pharmacist	142	35.7
	Doctor	216	54.3
	Neither	40	10.0
	Total	398*	100.0
Leg Cramps	Pharmacist	137	34.4
	Doctor	197	49.5
	Neither	64	16.1
	Total	398*	100.0
Skin Infections and Rashes	Pharmacist	134	33.8
	Doctor	240	60.4
	Neither	23	5.8
	Total	397*	100.0

Table 5-16--continued.

	Response	Frequency	Percent
Pinworms	Pharmacist	108	27.3
	Doctor	242	61.1
	Neither	46	11.6
	Total	396*	100.0
Nausea and Vomiting	Pharmacist	81	20.4
	Doctor	292	73.6
	Neither	24	6.0
	Total	397*	100.0
Burning Urination	Pharmacist	29	7.3
	Doctor	352	88.7
	Neither	16	4.0
	Total	397*	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

Table 5-17 Consumers' Views of the Law

	Response	Frequency	Percent
Consumers Who Would Give the Pharmacist Greater or Less Authority to Prescribe	Greater	69	17.4
	Less	84	21.1
	Law OK	178	44.7
	Uncertain	67	16.8
	Total	398*	100.0
Consumers Who Feel It Is a Good Idea to Have Such a Law	Yes	290	72.3
	No	72	18.0
	Uncertain	39	9.7
	Total	401*	100.0
Consumers Who Would Allow A Pharmacist to Prescribe for Them in the Future	Yes	274	68.5
	No	88	22.0
	Uncertain	38	9.5
	Total	400*	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

less authority, and 67 (16.8%) either had no opinion or were not sure.

As Table 5-17 indicates, a total of 290 (72.3%) of all respondents reported that they feel it is a good idea to have such law that allows pharmacists to prescribe prescription drugs. Another 72 (18.0%) reported that they did not think it was a good idea, while 39 (9.7%) were uncertain.

All respondents were asked if they would allow a pharmacist to prescribe for them in the future. Table 5-17 shows that the majority (274 or 68.5%) reported that they would. A lesser number (88 or 22.0%) reported that they would not, while only 38 (9.5%) reported that they were uncertain.

A total of 343 individuals replied to the question of whether they would be in favor of allowing four different types of health care professionals to prescribe. As presented in Table 5-18, respondents mostly answered "no" for physicians assistants (173 or 50.4%) and nurse practitioners (165 or 48.1%) and "yes" for chiropractors (143 or 41.8%) and optometrists (189 or 55.3%).

The respondents who reported that they would allow a pharmacist to prescribe for them were then asked if they would be willing to pay a consultation fee in addition to the cost of the prescription. As shown in Table 5-19, half (137 or 50.0%) reported that they would not, while a lesser

Table 5-18 Consumer Sentiment Concerning Other Health Professionals and Their Prescribing Privileges

Consumers Who Favor Allowing	Response	Frequency	Percent
Physicians Assistants to Prescribe	Yes	107	31.2
	No	173	50.4
	Uncertain	63	18.4
	Total	343*	100.0
Nurse Practitioners to Prescribe	Yes	125	36.4
	No	165	48.1
	Uncertain	53	15.5
	Total	343*	100.0
Chiropractors to Prescribe	Yes	143	41.8
	No	130	38.0
	Uncertain	69	20.2
	Total	342*	100.0
Optometrists to Prescribe	Yes	189	55.3
	No	107	31.3
	Uncertain	46	13.5
	Total	342*	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

Table 5-19 Consumer Willingness to Pay a Consultation Fee

	Response	Frequency	Percent
Consumers Who Would Pay a Fee for a Consultation Resulting in a Prescription	Yes	117	42.7
	No	137	50.0
	Uncertain	20	7.3
	Total	274	100.0
Amount Consumers Would Be Willing to Pay	$1.00	3	2.8
	$4.00	1	0.9
	$5.00	25	23.1
	$7.00	1	0.9
	$7.50	1	0.9
	$8.00	1	0.9
	$10.00	45	41.7
	$12.00	2	1.9
	$12.50	1	0.9
	$15.00	16	14.8
	$20.00	8	7.4
	$25.00	4	3.7
	Total	108*	100.0
Consumers Who Would Pay a Fee for a Consultation Resulting in an OTC Drug	Yes	57	21.0
	No	189	69.5
	Uncertain	26	9.6
	Total	272****	100.0
Amount Consumers Would Be Willing to Pay	$2.00	1	1.9
	$3.00	3	5.6
	$5.00	17	31.5
	$7.00	1	1.9
	$7.50	1	1.9
	$8.00	2	3.7
	$10.00	18	33.3
	$12.00	1	1.9
	$12.50	1	1.9
	$15.00	5	9.3
	$20.00	3	5.6
	$25.00	1	1.9
	Total	54**	100.0

Table 5-19--continued.

	Response	Frequency	Percent
Consumers Who Would Pay a Fee for a Consultation Resulting in a Recommendation that They See a Physician	Yes	47	17.3
	No	198	72.8
	Uncertain	27	9.9
	Total	272****	100.0
Amount Consumers Would be Willing to Pay	$3.00	1	2.3
	$5.00	15	34.1
	$7.00	1	2.3
	$8.00	1	2.3
	$10.00	20	45.5
	$12.50	1	2.3
	$15.00	3	6.8
	$20.00	1	2.3
	$25.00	1	2.3
	Total	44***	100.0
Consumers Who Would Allow a Pharmacist to Prescribe If an Insurance Company Would Pay the Cost	Yes	154	57.0
	No	87	32.2
	Uncertain	29	10.7
	Total	270****	100.0

* Does not indicate the expected total of 117 due to item nonresponse.

** Does not indicate the expected total of 57 due to item nonresponse.

*** Does not indicate the expected total of 47 due to item nonresponse.

**** Does not indicate the expected total of 274 due to item nonresponse.

number (117 or 42.7%) reported that they would. Fewer (20 or 7.3%) were uncertain. When asked how much they would consider to be reasonable, the median value for those who were willing to pay was $10.00. The range was from $1.00 to $25.00. The largest number of respondents answered $10.00 (45 or 41.7%), followed by $5.00 (25 or 23.1%), and $15.00 (16 or 14.8%).

The respondents who earlier reported that they would allow a pharmacist to prescribe for them were also asked if they would be willing to pay a consultation fee if the pharmacist, instead of prescribing a drug, recommended an OTC product. As seen in Table 5-19, a majority (189 or 69.5%) reported that they would not, while a lesser number (57 or 21.0%) reported that they would. Fewer (26 or 9.6%) were uncertain. When asked how much they would consider to be reasonable, the median value of those who were willing to pay was $10.00. The range was from $2.00 to $25.00. The largest number of respondents answered $10.00 (18 or 33.3%), followed by $5.00 (17 or 31.5%), and $15.00 (5 or 9.3%).

The respondents who earlier reported that they would allow a pharmacist to prescribe for them were again asked if they would be willing to pay a consultation fee if the pharmacist, instead of prescribing a drug, recommended that they see a physician. As Table 5-19 indicates, a majority (198 or 72.8%) reported that they would not while a lesser number (47 or 17.3%) reported that they would. Fewer (27 or 9.9%) were uncertain. When asked how much they would consider to be reasonable, the median value of those who were willing to pay was $10.00. The range was from $3.00 to $25.00. The largest number of respondents answered $10.00 (20 or 45.5%), followed by $5.00 (15 or 34.1%), and $15.00 (3 or 6.8%).

The respondents who earlier reported that they would allow a pharmacist to prescribe for them were then asked if insurance coverage would have any influence on their use of a pharmacist's prescribing services. That is, would they seek such services if a third party were to assume the costs. Most respondents, as indicated in Table 5-19, reported "yes," that they would (154 or 57.0%), followed by "no" (87 or 32.2%), and uncertain (29 or 10.7%).

Health Status

As shown in Table 5-20, the largest number of respondents reported that they were in excellent health (177 or 44.2%), with an almost equal number reporting that they were in good health (174 or 43.4%). A lesser number reported that they were in fair health (43 or 10.7%). Only 7 (1.7%) indicated that they were in poor health.

Other Findings

A total of 382 respondents gave estimates of the number of times within the last year that they had asked a pharmacist for advice on over-the-counter drugs or other

Table 5-20 Consumer Health Status

Response	Frequency	Percent
Excellent	177	44.2
Good	174	43.4
Fair	43	10.7
Poor	7	1.7
Total	401*	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

health information. Table 5-21 indicates that the range was from 0 times to 10 or more times with a mean of 1.9 times. The largest number of respondents answered zero times (181 or 47.4%), followed by one time (61 or 16.0%), two times (57 or 14.9%), three times (30 or 7.9%), and four times (19 or 5.0%).

In light of the new law, a total of 369 respondents gave estimates of whether they might consult a pharmacist for advice more often, less often, or about the same. Also seen in Table 5-21, a majority (290 or 78.6%) reported "about the same," while fewer (77 or 20.9%) reported "more often," and the least number (2 or 0.5%) reported "less often."

A total of 373 respondents gave estimates of how many pharmacies are located in the area where they personally trade. Again seen in Table 5-21, the range was from 0 stores (4 or 1.1%) to 10 or more stores (64 or 17.2%) with a mean of 6.1 stores. The largest number of respondents reported two stores (69 or 18.5%), followed by six stores (59 or 15.8%), then three stores (58 or 15.5%).

A total of 324 individuals responded to the question of the total number of years of college education they believed pharmacists are required to have in order to become licensed. Table 5-21 shows that the range was from 2 years (12 or 3.7%) to 12 or more years (2 or 0.6%) with a mean of 5.4 years. The largest number of respondents

Table 5-21 Other Findings

	Response	Frequency	Percent
Number of Times a Consumer Asked a Pharmacist for Advice in the Last Year	0	181	47.4
	1	61	16.0
	2	57	14.9
	3	30	7.9
	4	19	5.0
	5	6	1.6
	6	11	2.9
	7	1	0.3
	10 or more	16	4.2
	Total	382*	100.0
Consumers Reporting that They Will Seek a Pharmacist's Advice More or Less Frequently Because of the Law	More Frequently	77	20.9
	Less Frequently	2	0.5
	About the Same	290	78.6
	Total	369*	100.0
Number of Pharmacies in Consumer Trading Areas	0	4	1.1
	1	43	11.5
	2	69	18.5
	3	58	15.5
	4	39	10.5
	5	26	7.0
	6	59	15.8
	8	10	2.7
	9	1	0.3
	10 or more	64	17.2
	Total	373*	100.0
Years of College Consumers Believe are Required for Pharmacists	1	0	0.0
	2	12	3.7
	3	9	2.8
	4	83	25.6
	5	59	18.2
	6	104	32.1
	7	22	6.8
	8	30	9.3
	9	0	0.0
	10	3	0.9
	11	0	0.0
	12 or more	2	0.6
	Total	324*	100.0

Table 5-21--continued.

	Response	Frequency	Percent
Years of College Consumers Believe are Required for Physicians	1	0	0.0
	2	0	0.0
	3	0	0.0
	4	1	0.3
	5	6	1.7
	6	30	8.5
	7	34	9.7
	8	189	53.7
	9	6	1.7
	10	50	14.2
	11	1	0.3
	12 or more	35	8.9
	Total	352*	100.0

* Does not indicate the expected total of 402 due to item nonresponse.

correctly answered the existing six years (104 or 32.1%), or five years (59 or 18.2%), while a fairly large number (83 or 25.6%) answered the previously correct four years.

Similarly, a total of 352 individuals responded to the question of the total number of years of college education they believed required of physicians. Table 5-21 also shows that the range was from 4 years (1 or 0.3%) to 12 or more years (35 or 8.9%) with a mean of 8.4 years. A majority of the respondents correctly answered (the traditional) 8 years (189 or 53.7%), followed by 10 years (50 or 14.2%), and 7 years (34 or 9.7%).

Hypothesized Relationships

This section presents the tests of the hypothesized relationships. The statistical test used was a chi square. For each hypothesis, the cells of a table were filled with the counts of the respondents indicating a certain attitude, demographic characteristic, or perception of health status vs. a certain intention. For the purpose of the tests, the variables were reduced to include only the "agree-disagree" and "yes-no" responses. It was apparent that "no opinion" and "uncertain" had to be eliminated from the analysis or else many of the resulting tables would contain insufficiently filled cells.

The objective of this study was to test whether there is a difference between consumers who would accept or not accept pharmacist prescribing when viewed in terms of a specific attitude, demographic characteristic, or perception of health status. Since so many statistical tests were to be performed, a problem with the overall significance level was expected. Therefore, a conservative α value (.01) was chosen for significance testing. This represents the probability of a Type I error, or, that of rejecting the null hypothesis when it is true. If a significant relationship was indicated, then the chi square table was examined for the direction of the difference in order to determine whether the hypothesized direction of the relationship was supported.

The independent variables, as previously stated, appear below:

1. Perceived availability of a physician at the time of need.
2. Perceived access to a physician at the time of need.
3. Perceived burden of cost of time in visiting a physician.
4. Perceived burden of monetary cost in visiting a physician.
5. Perceived availability of a pharmacist at the time of need.
6. Perceived helpfulness of pharmacists.
7. Perceived competence of pharmacists.

8. Presence of a "pharmacist bond."
9. Perceived health status.
10. Consumer demographics.

The dependent variables, also previously stated, are as follows:

1. Consumer approval of the new law.
2. Consumer intent to have a pharmacist prescribe for them.
3. Consumer choice to first consult a pharmacist or a physician for specific health conditions.
4. Consumer willingness to pay a consultation fee when the pharmacist prescribes an allowable drug.
5. Consumer willingness to pay a consultation fee when the pharmacist recommends an OTC drug.
6. Consumer willingness to pay a consultation fee when the pharmacist recommends that the patient consult a physician.
7. Consumer willingness to accept pharmacist prescribing if a third party would pay the costs.

In the following section, each hypothesized relationship is presented and the evidence is examined.

Physician Availability

1. There will be a negative relationship between the perceived availability of a physician at the time of need and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers do not consider a physician to be readily available, then they might be more likely to rely upon a pharmacist as an alternate health care provider. There were five attitudinal statements serving as independent variables measuring physician availability, items 16, 17, 18, 19, and 21. The responses for these were compared on two dependent measures. These were items 69 and 71, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As seen in Table 5-22, there is no significant relationship between physician availability and consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future. However, whether or not the respondents viewed their physicians as available at the time of need, over 70% tended to favor pharmacist prescribing. Yet, the data do not support the hypothesis that consumers perceiving a physician to be unavailable at the time of need will accept pharmacist prescribing.

Physician Access

2. There will be a negative relationship between the perceived access to a physician at the time of need and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers do not have ready access to a physician when needed, then they might be more

Table 5-22 Statistical Summary for Physician Availability and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes) %	Approval (yes) χ^2	Approval (yes) p<	Response (N)	Intent (yes) %	Intent (yes) χ^2	Intent (yes) p<
16	Can get an appointment with a physician in 2-3 days	Agree (315)	79.68	.08	.78	Agree (321)	74.77	.66	.42
		Disagree (38)	81.58			Disagree (32)	81.25		
17	Can see a physician without an appointment	Agree (179)	78.21	.09	.77	Agree (182)	72.53	1.04	.31
		Disagree (142)	79.58			Disagree (138)	77.54		
18	Physician is available after office hours	Agree (168)	80.36	.01	.95	Agree (177)	72.32	1.98	.16
		Disagree (119)	80.67			Disagree (113)	79.65		
19	Physician will talk over the telephone	Agree (246)	77.64	0.44	.04	Agree (255)	73.33	3.18	.08
		Disagree (72)	88.89			Disagree (63)	84.13		
21	Physician does not like to be troubled unless necessary	Agree (55)	78.18	.03	.86	Agree (51)	76.47	.17	.68
		Disagree (246)	79.27			Disagree (255)	73.73		

likely to rely upon a pharmacist as an alternate health care provider. There were four attitudinal statements serving as independent variables measuring physician access, items 20, 32, 33, and 34. The responses for these were similarly compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As shown in Table 5-23, there is no significant relationship between access to a physician and consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future. However, whether or not respondents viewed their physicians as accessible at the time of need, over 60% tended to favor pharmacist prescribing. Yet, the data do not support the hypothesis that consumers perceiving a lack of access to a physician when the need arises will accept pharmacist prescribing.

Monetary Cost

3. There will be a positive relationship between the perceived burden of monetary cost in visiting a physician and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers cannot afford physician care, then they might be more likely to rely upon a pharmacist as an alternate health care provider. There were five attitudinal statements serving as independent

Table 5-23 Statistical Summary for Physician Access and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	$p<$		%	χ^2	$p<$
20	Getting transportation to the physician's office can be a problem	Agree (35)	80.00	0.00	1.00	Agree (32)	65.63	1.99	.16
		Disagree (325)	80.00			Disagree (328)	76.83		
32	Transportation to the physician's office costs too much	Agree (23)	69.57	1.59	.21	Agree (28)	60.00	2.69	.10
		Disagree (333)	80.48			Disagree (377)	76.26		
33	Physician's office is conveniently located	Agree (313)	80.51	.02	.88	Agree (317)	75.39	.20	.65
		Disagree (44)	79.55			Disagree (42)	78.57		
34	Must travel over 30 minutes each way to see a physician	Agree (56)	73.21	1.95	.16	Agree (53)	69.81	1.03	.31
		Disagree (300)	81.33			Disagree (304)	76.32		

variables measuring monetary cost, items 30, 31, 36, 37, and 38. The responses for these were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As indicated in Table 5-24, there is no significant relationship between the monetary cost of visiting a physician and consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future. However, whether or not consumers perceived a burden of monetary cost in visiting a physician, over 70% tended to favor pharmacist prescribing. Yet, the data do not support the hypothesis that consumers who perceive a burden of monetary cost in visiting a physician will accept pharmacist prescribing.

Pharmacist Availability

4. There will be a positive relationship between the perceived availability of a pharmacist at the time of need and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers perceive a pharmacist as being available and approachable then they might be more likely to accept him in a prescribing role. There were two attitudinal statements serving as independent variables measuring pharmacist availability,

Table 5-24 Statistical Summary for Monetary Cost and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
30	Afraid the medications will be too expensive	Agree (86)	76.74	1.15	.28	Agree (81)	75.31	.15	.70
		Disagree (213)	82.16			Disagree (217)	77.42		
31	Has to lose pay from work in order to visit a physician	Agree (72)	76.39	.89	.35	Agree (66)	77.27	.09	.76
		Disagree (284)	81.34			Disagree (290)	75.52		
36	Must pay physician a separate fee for each time contacted	Agree (45)	76.09	1.03	.31	Agree (45)	73.33	.56	.46
		Disagree (228)	82.46			Disagree (227)	78.41		
37	Physician visits are too expensive	Agree (84)	85.71	.93	.34	Agree (80)	81.25	.44	.51
		Disagree (194)	80.93			Disagree (197)	77.66		
38	Physician fees are reasonable	Agree (215)	81.40	1.29	.26	Agree (219)	76.71	3.67	.06
		Disagree (64)	87.50			Disagree (59)	88.14		

items 40 and 41. The responses for these were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

The results partially supported this hypothesis. As shown in Table 5-25, one attitudinal statement resulted in a significant relationship with consumer acceptance of pharmacist prescribing and one did not. That is, almost 85% of the consumers reporting that pharmacists will talk to them over the telephone also approve of the law ($p<.01$) and 80% would allow a pharmacist to prescribe for them in the future ($p<.01$). However, there is no significant relationship between consumers who reported that pharmacists talk to them in person rather than through a clerk and consumer approval of the law ($p<.92$) or consumer willingness to allow a pharmacist to prescribe in the future ($p<.28$).

Pharmacist Helpfulness

5. There will be a positive relationship between the perceived helpfulness of pharmacists and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers perceive a pharmacist as being helpful, they will be more likely to accept him in a prescribing role. There were three statements serving as independent variables measuring pharmacist helpfulness, items 39, 42, and 43.

Table 5-25 Statistical Summary for Pharmacist Availability and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
40	Pharmacist relates information through the drug clerk	Agree (106)	81.13	.01	.92	Agree (100)	74.00	1.19	.28
		Disagree (277)	80.65			Disagree (100)	74.00		
41	Pharmacist will talk over the telephone	Agree (224)	84.38	10.28	.01	Agree (232)	80.60	8.85	.01
		Disagree (37)	62.16			Disagree (33)	57.58		

As seen in Table 5-26, the results partially supported this hypothesis. Almost 84% of those consumers who feel comfortable in asking a pharmacist for advice and information also approve of the law ($p<.01$) and almost 81% would allow a pharmacist to prescribe for them in the future ($p<.01$). However, there is no significant relationship between consumers who feel that pharmacists try to save them money on prescriptions and their acceptance of pharmacist prescribing. Likewise, there is no significant relationship between consumers who feel that pharmacists show a personal concern for their health and their acceptance of pharmacist prescribing.

Pharmacist Competence

6. There will be a positive relationship between the perceived competence of pharmacists and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers consider pharmacists to be competent, then they might be more likely to accept them in a prescribing role. There were two attitudinal statements serving as independent variables thought to be measuring pharmacist competence, items 44 and 45. The responses for these statements were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

Table 5-26 Statistical Summary for Pharmacist Helpfulness and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
39	Patient feels comfortable in asking pharmacist for advice or information	Agree (287)	83.97	8.28	.01	Agree (291)	80.76	8.90	.01
		Disagree (44)	65.91			Disagree (40)	60.00		
42	Pharmacist shows a personal concern for patient's health	Agree (235)	81.70	.23	.63	Agree (239)	79.08	1.71	.19
		Disagree (57)	78.95			Disagree (55)	70.91		
43	Pharmacist tries to save patient money on prescriptions	Agree (228)	85.09	3.42	.07	Agree (234)	80.34	4.90	.03
		Disagree (46)	73.91			Disagree (43)	65.12		

As seen in Table 5-27, the results from these attitudinal statements partially supported this hypothesis. That is, over 82% of those consumers reporting that they trust a pharmacist's recommendations and advice also approve of the law (p<.01) and almost 80% would allow a pharmacist to prescribe for them in the future (p<.01). In addition, almost 73% of the consumers who reported that they do not seek another opinion in addition to what a pharmacist tells them tend to approve of the law (p<.01), but there is no significant relationship between consumers expressing this attitude and their willingness to allow a pharmacist to prescribe in the future (p<.09).

Pharmacist Bond

7. There will be a positive relationship between the presence of a pharmacist bond and consumer acceptance of pharmacist prescribing.

It was reasoned that if consumers have a bond with their pharmacist, then they might be more likely to accept him in a prescribing role. There were four attitudinal statements serving as independent variables thought to be measuring the presence of a pharmacist bond, items 46, 47, 48, and 49. These statements were presented only to those respondents reporting that they have one pharmacy in particular where they trade most of the time. The responses for these statements were compared on two

Table 5-27 Statistical Summary for Pharmacist Competence and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
44	Trusts pharmacist recommendations and advice	Agree (297)	82.49	11.29	.01	Agree (303)	79.21	11.89	.01
		Disagree (24)	54.17			Disagree (23)	47.83		
45	Prefers another opinion in addition to that of the pharmacist	Agree (114)	72.81	8.41	.01	Agree (112)	72.32	2.88	.09
		Disagree (189)	86.24			Disagree (192)	80.73		

dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As indicated in Table 5-28, there is no significant relationship between the presence of a bond with a pharmacist and consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future. However, whether or not the respondents indicated that they have a bond with their pharmacist, over 70% tended to favor pharmacist prescribing. Yet, the presence of a pharmacist bond does not seem to make a difference in whether or not consumers would accept pharmacist prescribing.

Demographic Characteristics

8. Older individuals will be more likely to accept pharmacist prescribing.

For the purpose of this study, respondents were grouped into four age categories for analysis: (1) 18 to 24 years, (2) 25 to 54 years, (3) 55 to 64 years, and (4) age 65 and above. These are the categories used by the National Health Care Expenditure Survey (Kasper, 1983). The categories of age were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As indicated in Table 5-29, there is no significant relationship between age and consumer approval of the law

Table 5-28 Statistical Summary for Pharmacist Bond and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	$p<$		%	χ^2	$p<$
46	Pharmacist knows patient by name	Agree (129)	83.72	1.66	.20	Agree (134)	78.36	1.83	.18
		Disagree (128)	77.34			Disagree (128)	71.09		
47	Pharmacist usually calls patient by name	Agree (124)	85.48	3.32	.07	Agree (128)	80.47	3.38	.07
		Disagree (132)	76.52			Disagree (133)	70.68		
48	Pharmacist usually will stop to talk	Agree (116)	86.21	4.84	.03	Agree (121)	79.34	2.45	.12
		Disagree (128)	75.00			Disagree (130)	70.77		
49	Patient feels he can confide in pharmacist	Agree (122)	87.70	6.04	.02	Agree (126)	80.16	2.90	.09
		Disagree (118)	75.42			Disagree (120)	70.83		

Table 5-29 Statistical Summary for Hypothesized Demographic Characteristics and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
		%	χ^2	$p<$		%	χ^2	$p<$
Age Group	18-24 (52)	86.54	4.08	.25	18-24 (50)	86.00	14.09	.01
	25-54 (178)	82.02			25.54 (172)	80.81		
	55-64 (49)	75.51			55-64 (53)	69.81		
	Over 64 (82)	74.39			Over 64 (86)	62.79		
Race	White (318)	80.19	.56	.76	White (323)	76.16	1.03	.60
	Black (29)	82.76			Black (25)	76.00		
	Hispanic (15)	73.33			Hispanic (14)	64.29		
Race Group	White (318)	80.19	.01	.92	White (323)	76.16	.36	.55
	Nonwhite (44)	79.55			Nonwhite (39)	71.79		

Table 5-29--continued.

Item	Response (N)	Approval (yes) %	Approval (yes) χ^2	Approval (yes) p<	Response (N)	Intent (yes) %	Intent (yes) χ^2	Intent (yes) p<
Education	Elementary School (38)	73.68	6.22	.18	Elementary School (35)	65.71	8.29	.08
	High School (138)	80.43			High School (143)	73.43		
	Some College (99)	82.83			Some College (94)	80.85		
	College (58)	72.41			College (61)	72.13		
	Past College (27)	92.59			Past College (27)	92.59		
Income	Under $10,000 (84)	75.00	2.94	.57	Under $10,000 (74)	67.57	8.58	.08
	$10,001-$30,000 (148)	83.11			$10,001-$30,000 (160)	73.13		
	$30,001-$50,000 (88)	79.55			$30,001-$50,000 (82)	82.93		
	$50,001-$75,000 (12)	83.33			$50,001-$75,000 (13)	92.31		
	Over $75,000 (10)	90.00			Over $75,000 (10)	90.00		
Single Member Household	Single (90)	77.78	.33	.57	Single (87)	70.11	1.74	.19
	Nonsingle (268)	80.60			Nonsingle (271)	77.12		

(p<.25), but there is a significant relationship between age and consumer willingness to allow a pharmacist to prescribe in the future (p<.01). However, a closer examination reveals that the differences are not in the direction hypothesized. The age groups most likely to allow a pharmacist to prescribe are the 18- to 24- and 25- to 54-year-old categories, where over 80% indicated such intent.

9. White consumers will be more likely to accept pharmacist prescribing.

First, all categories of race were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future. Second, the categories for race were regrouped into white and nonwhite and compared on the same dependent measures.

Table 5-29 shows that there is no significant relationship between race and consumer approval of the law (p<.76) or consumer willingness to allow a pharmacist to prescribe in the future (p<.60). Similarly, when the white and nonwhite races are compared, there is, likewise, no significant relationship between race and consumer approval of the law (p<.92) or consumer willingness to allow a pharmacist to prescribe in the future (p<.55). However, over 60% of the respondents in all race categories tended to favor pharmacist prescribing.

10. Higher educated consumers will be more likely to accept pharmacist prescribing.

For the purpose of this study, education was grouped into the five categories used by the U.S. Department of Census. These categories were compared on two dependent measures, consumer approval of the law and consumer willingness to allow a pharmacist to prescribe in the future.

Table 5-29 shows that there is no significant relationship between education and consumer approval of the law ($p<.18$). There is also no significant relationship between education and consumer willingness to allow a pharmacist to prescribe in the future ($p<.08$). However, over 65% of the respondents in all categories of education tended to favor pharmacist prescribing.

11. Both low and high income consumers rather than middle income consumers will be more likely to accept pharmacist prescribing.

For the purpose of this study, five annual household income categories were selected prior to collection of data. These were (1) below $10,000, (2) $10,001 to $30,000, (3) $30,001 to $50,000, (4) $50,001 to $75,000, and (5) above $75,000. It was reasoned that these categories represent a broad and realistic distribution of household income that might indicate various spending patterns.

The categories of income were compared on two dependent measures, consumer approval of the law and whether or not consumers would allow a pharmacist to prescribe for them in the future.

Table 5-29 shows that there is no significant relationship between income and consumer approval of the law ($p<.57$). There is also no significant relationship between income and consumer willingness to allow a pharmacist to prescribe in the future ($p<.08$). However, over 70% of the respondents in all income categories tended to favor pharmacist prescribing.

12. Consumers from single member households will be more likely to accept pharmacist prescribing.

Consumers were grouped into the categories of single (living alone) and nonsingle (two or more household members). These categories were compared on two dependent variables, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

Table 5-29 indicates that there is no significant relationship between consumers who do and do not live alone and approval of the law ($p<.57$). There is also no significant relationship between consumers who do and do not live alone and willingness to allow a pharmacist to prescribe in the future ($p<.19$). However, over 70% of the respondents from both categories of households tended to favor pharmacist prescribing.

It was expected that age might be confounding the outcomes of the tests concerning single member households. Therefore, further tests of significance were performed while controlling for age. For the purpose of these tests, age was divided into two groups, 18 to 54 years and 55 years and above. Even when performed in this manner, there is no significant relationship between single and nonsingle member households and approval of the law or willingness to allow a pharmacist to prescribe in the future.

Investigated Relationships

The following questions do not have support from the literature and are being answered here.

Cost of Time in Visiting a Physician

1. What is the relationship between the perceived burden of cost of time in visiting a physician and consumer acceptance of pharmacist prescribing?

It was reasoned that if consumers either cannot afford the time or do not want to spend the time in order to visit a physician, then they might be more likely to rely upon the pharmacist as an alternate health care provider. There were two statements serving as independent variables measuring time cost, items 22 and 33. The responses for these were compared on two dependent measures, consumer approval of the law and consumer willingness to allow a pharmacist to prescribe in the future.

As presented in Table 5-30, there is no significant relationship between consumers who report that they have to wait too long in a physician's office and approval of the law (p<.32) or willingness to allow a pharmacist to prescribe in the future (p<.11). Likewise, there is no significant relationship between consumers who report that they do not mind waiting up to 30 minutes in a physician's office and approval of the law (p<.32) or willingness to allow a pharmacist to prescribe in the future (p<.11). However, whether or not respondents were concerned with their cost of time in visiting a physician, over 70% tended to favor pharmacist prescribing.

Satisfaction with Physicians

2. What is the relationship between consumer satisfaction with their physician care and consumer acceptance of pharmacist prescribing?

It was reasoned that if consumers are not satisfied with their physician's care, then they might be more likely to consider the pharmacist as an alternate health care provider. There were seven attitudinal statements serving as independent variables measuring consumer satisfaction with physicians, items 23, 24, 25, 26, 27, 28, and 29. The

Table 5-30 Statistical Summary for Time Cost and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
22	Has to wait too long in the office when visiting a physician	Agree (125)	83.20	1.00	.32	Agree (117)	81.20	2.66	.11
		Disagree (231)	78.79			Disagree (240)	73.33		
35	Doesn't mind waiting up to 30 minutes when visiting a physician	Agree (245)	80.00	.04	.84	Agree (245)	74.69	.53	.47
		Disagree (105)	79.05			Disagree (106)	78.30		

responses for these were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As seen in Table 5-31, none of the attitudinal statements resulted in a significant relationship with consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future. However, whether or not respondents expressed satisfaction with their physicians, over 70% tended to favor pharmacist prescribing. Yet, the data do not support the expectation that consumers who are dissatisfied with their present level of physician care are more likely to accept pharmacist prescribing.

Consumer Health Status

3. What is the relationship between perceived health status and consumer acceptance of pharmacist prescribing?

The categories of health status were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future. Interestingly, Table 5-32 shows that there is no significant relationship between the perceived health status of consumers and approval of the law ($p<.99$). There is, likewise, no significant relationship

Table 5-31 Statistical Summary for Physician Satisfaction and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item No.	Statement	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
			%	χ^2	p<		%	χ^2	p<
23	Patient is satisfied with the time physician spends with him	Agree (313)	77.96	4.16	.05	Agree (318)	73.58	5.11	.03
		Disagree (38)	92.11			Disagree (34)	91.18		
24	Physician seems to be rushing patient	Agree (48)	85.42	1.18	.28	Agree (45)	88.89	5.13	.03
		Disagree (304)	78.62			Disagree (307)	73.29		
25	Physician spends extra time with patient when needed	Agree (298)	79.87	0.00	.99	Agree (304)	74.67	.54	.47
		Disagree (35)	80.00			Disagree (31)	80.65		
26	Physician lets patient finish explaining his condition	Agree (329)	79.64	.46	.50	Agree (333)	74.47	3.99	.05
		Disagree (21)	85.71			Disagree (19)	94.74		
27	Physician uses terms not understood	Agree (105)	77.14	.73	.40	Agree (100)	76.00	.01	.94
		Disagree (249)	81.12			Disagree (254)	75.59		

Table 5-31--continued.

Item No.	Statement	Response (N)	Approval (yes) %	Approval (yes) χ^2	Approval (yes) p<	Response (N)	Intent (yes) %	Intent (yes) χ^2	Intent (yes) p<
28	Physician always explains the condition to the patient	Agree (326)	79.75	.06	.81	Agree (325)	74.77	.76	.39
		Disagree (27)	77.78			Disagree (28)	82.14		
29	Physician will say frankly if he doesn't know what the problem is	Agree (259)	78.38	2.82	.10	Agree (266)	72.18	2.78	.10
		Disagree (46)	89.13			Disagree (44)	84.09		

Table 5-32 Statistical Summary for Health Status and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item	Response (N)	Approval (yes)			Response (N)	Intent (yes)		
		%	χ^2	p<		%	χ^2	p<
Health Status	Excellent (164)	79.88	.14	.99	Excellent (165)	76.36	3.04	.39
	Good (155)	80.65			Good (153)	77.78		
	Fair (37)	78.38			Fair (37)	67.57		
	Poor (6)	83.33			Poor (7)	57.14		

between the perceived health status of consumers and willingness to allow a pharmacist to prescribe in the future (p<.39). However, over 50% of the respondents from all categories of health status tended to favor pharmacist prescribing.

Demographic Characteristics

4. What is the relationship between sex and consumer acceptance of pharmacist prescribing?

The categories of sex were compared on two dependent measures, consumer approval of the law and whether or not consumers would allow a pharmacist to prescribe for them in the future. Table 5-33 indicates that there is no significant relationship between sex and consumer approval of the law (p<.76). There is also no significant relationship between sex and consumer willingness to allow a pharmacist to prescribe in the future (p<.30). However, over 70% of the respondents of both sexes tended to favor pharmacist prescribing.

5. What is the relationship between marital status and consumer acceptance of pharmacist prescribing?

The categories of marital status were compared on two dependent measures, consumer approval of the law and whether consumers would allow a pharmacist to prescribe for them in the future.

As presented in Table 5-33, there is a significant relationship between consumer marital status and acceptance

Table 5-33 Statistical Summary for Investigated Demographic Characteristics and Consumer Approval of the Law and Consumer Intent to Allow a Pharmacist to Prescribe

Item	Response (N)	Approval (yes) %	Approval (yes) χ^2	Approval (yes) p<	Response (N)	Intent (yes) %	Intent (yes) χ^2	Intent (yes) p<
Sex	Male (121)	80.99	.10	.76	Male (119)	78.99	1.09	.30
	Female (240)	79.58			Female (242)	73.97		
Marital Status	Single (84)	84.52	11.57	.01	Single (83)	80.72	13.05	.01
	Married (214)	80.84			Married (219)	77.17		
	Divorced (17)	94.12			Divorced (15)	86.67		
	Widowed (46)	63.04			Widowed (44)	54.55		
Dependent Children in the Household	Children (112)	85.71	3.32	.70	Children (106)	87.74	12.07	.01
	No Children (248)	77.42			No Children (254)	70.47		

of pharmacist prescribing. A closer examination of the table reveals that widowed individuals are less likely either to approve of the law ($p<.01$) or to allow a pharmacist to prescribe for them ($p<.01$) than individuals who are married, single, or divorced. In retrospect, never married might have been a better classification than single since some individuals who may be divorced or widowed might have considered themselves to be single. Nevertheless, over 50% of the respondents from all categories of marital status tended to favor pharmacist prescribing.

6. What is the relationship between the presence of dependent children in the household and consumer acceptance of pharmacist prescribing?

The categories of consumers with and without dependent children were compared on two dependent measures, consumer approval of the law and consumer willingness to allow a pharmacist to prescribe in the future.

As seen in Table 5-33, the presence or absence of dependent children in the consumer household resulted in no significant relationship with approval of the law ($p<.70$). However, those consumers living in households with dependent children are more likely to allow a pharmacist to prescribe for them in the future ($p<.01$). Yet, over 70% of the respondents from each household category tended to favor pharmacist prescribing.

It was expected that age might be confounding the results of marital status and the presence of dependent children in the household. Therefore, further tests of significance were performed while controlling for age. For the purpose of these tests, age was divided into two groups, 18 to 54 years and 55 years and above.

It was observed that, of those individuals aged 55 years and above, only 59.52% of the widowed individuals but 82.02% of all other individuals approve of the law ($p<.01$). However, no significant relationship resulted between consumer marital status and willingness to allow a pharmacist to prescribe in the future ($p<.04$).

The group of individuals aged 18 to 54 years with dependent children in the household did not result in a significant relationship with consumer approval of the law ($p<.29$). Likewise, there was no significant relationship between consumers and willingness to allow a pharmacist to prescribe in the future ($p<.03$).

The data suggest that age does overlap to a degree with marital status. In summary, older individuals who are widowed are less likely to approve of the law than other groups. The remaining groups resulted in no significant relationships with either consumer approval of the law or consumer willingness to allow a pharmacist to prescribe in the future.

Consumer Willingness to Pay a Consultation Fee

7. Consumer willingness to pay a fee for a consultation with a pharmacist concerning drug product selection.

The concept of a consultation fee was broken down into three parts: (a) a fee for a consultation resulting in a drug being prescribed by the pharmacist, (a) a fee for a consultation resulting in an OTC drug being recommended by the pharmacist, and (c) a fee for a consultation resulting in a recommendation to consult a physician. These questions were asked of those respondents reporting that they would allow a pharmacist to prescribe for them in the future. The responses for each type of consultation fee were matched with those of each demographic category: (1) age group, (2) race (all groups), (3) white vs. nonwhite (selected from race), (4) education, (5) income, (6) single vs. nonsingle member households, (7) health status, (8) sex, (9) marital status, and (1) whether or not dependent children are present in the household.

a. Consumer willingness to pay a consultation fee if the pharmacist evaluated the condition and prescribed a drug.

As shown in Table 5-34, there were no demographic characteristics that resulted in significant relationships with consumer willingness to pay a consultation fee if the

Table 5-34 Statistical Summary for Consumer Demographic Characteristics and Willingness to Pay a Fee for a Consultation Resulting in a Prescribed Drug

Item	Response (N)	Willingness (yes) %	χ^2	p<
Age Group	18-24 (42)	52.38	9.10	.03
	25-54 (129)	52.71		
	55-64 (32)	37.50		
	Over 64 (50)	30.00		
Age Group	18-54 (171)	52.63	8.66	.01
	Over 54 (82)	32.93		
Race	White (227)	44.49	2.17	.34
	Black (19)	57.89		
	Hispanic (8)	62.50		
Race Group	White (227)	44.49	2.12	.15
	Nonwhite (27)	59.26		
Education	Elementary School (22)	63.64	8.46	.08
	High School (98)	52.04		
	Some College (70)	44.29		
	College (40)	35.00		
	Post College (23)	30.43		

Table 5-34--continued.

Item	Response (N)	Willingness (yes) %	χ^2	p<
Income	Under $10,000 (48)	52.08	1.38	.85
	$10,001-$30,000 (106)	46.23		
	$30,001-$50,000 (62)	48.39		
	$50,001-$75,000 (12)	41.67		
	Over $75,000 (9)	33.33		
Single Member Household	Single (53)	39.62	1.10	.30
	Nonsingle (197)	47.72		
Health Status	Excellent (117)	43.59	1.09	.78
	Good (111)	49.55		
	Fair (23)	43.48		
	Poor (3)	33.33		
Sex	Male (89)	37.08	4.25	.04
	Female (164)	50.61		
Marital Status	Single (62)	48.39	.94	.82
	Married (159)	46.54		
	Divorced (12)	33.33		
	Widowed (20)	45.00		
Dependent Children in the Household	Children (90)	51.11	1.46	.23
	No Children (102)	43.21		

pharmacist prescribed a drug. However, when age was regrouped into the categories of 18 to 54 years and 55 years and above, it was seen that the younger group of consumers would be more likely to pay a consultation fee resulting in a prescribed drug ($p<.01$), where over 50% of this group expressed a willingness to pay.

b. Consumer willingness to pay a consultation fee if the pharmacist evaluated the condition and recommended an OTC drug.

As indicated in Table 5-35, there were no demographic characteristics that resulted in significant relationships with consumer willingness to pay a consultation fee if the pharmacist recommended an OTC drug. However, age again was regrouped into the categories of 18 to 54 years and 55 years and above and it was seen that the younger group of consumers would be more likely to pay a consultation fee resulting in the recommendation of an OTC drug ($p<.01$), where almost 30% expressed a willingness to pay.

c. Consumer willingness to pay a consultation fee if the pharmacist evaluated the condition and recommended a consultation with a physician.

As seen in Table 5-36, there were no demographic characteristics that resulted in significant relationships with consumer willingness to pay a consultation fee if the pharmacist recommended that the patient consult a physician.

Table 5-35 Statistical Summary for Consumer Demographic Characteristics and Willingness to Pay a Fee for a Consultation Resulting in the Recommendation of an OTC Drug

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Age Group	18-24 (40)	27.50	10.81	.02
	25-54 (130)	29.23		
	55-64 (29)	17.24		
	Over 64 (46)	6.52		
Age Group	18-54 (170)	28.82	9.61	.01
	Over 54 (75)	10.67		
Race	White (220)	21.36	4.35	.12
	Black (19)	42.11		
	Hispanic (7)	28.57		
Race Group	White (220)	21.36	3.82	.06
	Nonwhite (26)	38.46		
Education	Elementary School (16)	25.00	1.99	.74
	High School (97)	21.65		
	Some College (68)	27.94		
	College (41)	17.07		
	Post College (23)	26.09		

Table 5-35--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Income	Under $10,000 (44)	22.73	3.00	.56
	$10,001-$30,000 (104)	27.88		
	$30,001-$50,000 (62)	19.35		
	$50,001-$75,000 (11)	9.09		
	Over $75,000 (9)	22.22		
Single Member Household	Single (51)	21.57	.13	.72
	Nonsingle (192)	23.96		
Health Status	Excellent (114)	20.18	3.30	.35
	Good (107)	28.04		
	Fair (22)	13.64		
	Poor (3)	33.33		
Sex	Male (87)	18.39	1.53	.22
	Female (158)	25.32		
Marital Status	Single (61)	26.23	1.89	.60
	Married (155)	23.87		
	Divorced (12)	16.67		
	Widowed (17)	11.76		
Dependent Children in the Household	Children (88)	27.27	1.18	.28
	No Children (156)	21.15		

Table 5-36 Statistical Summary for Consumer Demographic Characteristics and Willingness to Pay a Fee for a Consultation Resulting in the Recommendation to See a Physician

Item	Response (N)	Willingness (yes) %	X^2	p<
Age Group	18-24 (39)	15.38	8.05	.05
	25-54 (128)	25.78		
	55-64 (30)	13.33		
	Over 64 (47)	8.51		
Age Group	18-54 (167)	23.35	5.70	.02
	55-64 (77)	10.39		
Race	White (222)	18.02	3.07	.22
	Black (16)	25.00		
	Hispanic (7)	42.86		
Race Group	White (222)	18.02	2.07	.15
	Nonwhite (23)	30.43		
Education	Elementary School (17)	23.53	1.99	.74
	High School (96)	15.63		
	Some College (67)	23.88		
	College (41)	19.51		
	Post College (23)	17.39		

Table 5-36--continued.

Item	Response (N)	Willingness (yes)		
		%	X^2	p<
Income	Under $10,000 (44)	18.18	4.90	.30
	$10,001-$30,000 (104)	24.04		
	$30,001-$50,000 (61)	16.39		
	$50,001-$75,000 (11)	0.00		
	Over $75,000 (9)	11.11		
Single Member Household	Single (51)	21.57	.19	.64
	Nonsingle (191)	18.85		
Health Status	Excellent (115)	16.52	3.81	.29
	Good (105)	23.81		
	Fair (22)	9.09		
	Poor (3)	33.33		
Sex	Male (88)	15.91	.78	.38
	Female (156)	20.51		
Marital Status	Single (60)	21.67	.40	.95
	Married (154)	18.83		
	Divorced (13)	15.38		
	Widowed (17)	17.65		
Dependent Children in the Household	Children (86)	22.09	.65	.43
	No Children (157)	17.83		

8. Consumer willingness to take advantage of a pharmacist's prescribing services if a third party would pay the cost.

The intent of this question was to determine if the actual monetary cost is the primary reason that consumers would not favor a consultation fee. Perhaps some individuals object to paying a fee simply because they feel it is not warranted.

As presented in Table 5-37, age (p<.01) and income (p<.01) were the only demographic characteristics that resulted in significant relationships with consumer acceptance of pharmacist prescribing if a third party would pay the costs. A closer examination of the table reveals that consumers aged 18 to 54 years are the most willing to allow a pharmacist to prescribe. This is also the case for consumers with annual family incomes of $10,000 and below. It is interesting to note that individuals with higher incomes apparently object to the idea of a pharmacist receiving a fee for his services. All other demographic characteristics examined resulted in no significant relationships with consumer willingness to allow a pharmacist to prescribe if a third party would pay the costs.

Consumers First Consulting a Pharmacist for Specific Health Ailments

9. Consumer choice whether to first consult a pharmacist or a physician for an initial

Table 5-37 Statistical Summary for Consumer Demographic Characteristics and Willingness to Allow a Pharmacist to Prescribe If A Third Party Would Pay the Costs

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Age Group	18-24 (39)	74.36	14.22	.01
	25-54 (126)	70.63		
	55-64 (32)	50.00		
	Over 64 (43)	44.19		
Race	White (218)	61.93	3.88	.15
	Black (18)	83.33		
	Hispanic (5)	80.00		
Race Group	White (218)	61.93	3.86	.05
	Nonwhite (23)	82.61		
Education	Elementary School (17)	58.82	2.79	.60
	High School (96)	69.79		
	Some College (65)	58.46		
	College (38)	63.16		
	Post College (24)	58.33		
Income	Under $10,000 (43)	74.42	13.97	.01
	$10,001-$30,000 (105)	68.57		
	$30,001-$50,000 (60)	66.67		
	$50,001-$75,000 (11)	45.45		
	Over $75,000 (8)	12.50		

Table 5-37--continued.

Item	Response (N)	Willingness (yes) %	χ^2	p<
Single Member Household	Single (50)	58.00	1.04	.31
	Nonsingle (187)	65.78		
Health Status	Excellent (111)	62.16	1.23	.75
	Good (104)	67.31		
	Fair (22)	59.09		
	Poor (4)	50.00		
Sex	Male (82)	57.32	2.23	.14
	Female (158)	67.09		
Marital Status	Single (59)	71.19	4.39	.23
	Married (153)	63.40		
	Divorced (10)	60.00		
	Widowed (18)	44.44		
Dependent Children in the Household	Children (87)	70.11	2.21	.14
	No Children (152)	60.53		

consultation concerning specific health ailments.

Table 5-16 lists the categories of health ailments or conditions for which respondents reported that they would first consult a pharmacist as opposed to a physician. These are arranged in descending order. The top three are (1) head lice, (2) corns and warts, and (3) fluoride vitamins.

Also seen in Table 5-16 are the three conditions for which respondents reported that they would be least likely to consult a pharmacist. These are (1) pinworms, (2) nausea and vomiting, and (3) burning urination.

The categories of ten demographic characteristics were analyzed for significant relationships when compared on consumer willingness to first consult a pharmacist for these health ailments. The demographic characteristics analyzed were (1) age group, (2) race (all groups), (3) race group (white and nonwhite), (4) education, (5) income, (6) single and nonsingle member households, (7) health status, (8) sex, (9) marital status, and (10) the presence or absence of small children in the household.

a. Consumer reactions to the top three health ailments (head lice, corns and warts, and fluoride vitamins).

Table 5-38 indicates that there are significant relationships between five demographic characteristics and

Table 5-38 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Head Lice

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Age Group	18-24 (53)	62.26	22.14	.01
	25-54 (177)	68.93		
	55-64 (47)	61.70		
	Over 64 (75)	37.33		
Race	White (310)	63.55	11.22	.01
	Black (29)	34.48		
	Hispanic (14)	42.86		
Race Group	White (310)	63.55	10.95	.01
	Nonwhite (43)	37.21		
Education	Elementary School (38)	50.00	7.43	.12
	High School (137)	55.47		
	Some College (94)	67.02		
	College (61)	60.66		
	Post College (22)	77.27		
Income	Under $10,000 (80)	47.50	8.46	.08
	$10,001-$30,000 (145)	64.83		
	$30,001-$50,000 (86)	65.12		
	$50,001-$75,000 (12)	66.67		
	Over $75,000 (8)	75.00		

Table 5-38--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Income	Below $10,000 (80)	47.50	8.12	.01
	$10,000 and Above (251)	65.34		
Single Member Household	Single (82)	52.44	2.55	.11
	Nonsingle (268)	62.31		
Health Status	Excellent (158)	62.66	1.39	.71
	Good (152)	59.21		
	Fair (36)	58.33		
	Poor (7)	42.86		
Sex	Male (116)	58.62	.19	.67
	Female (236)	61.02		
Marital Status	Single (88)	62.50	13.89	.01
	Married (210)	63.33		
	Divorced (15)	73.33		
	Widowed (39)	33.33		
Dependent Children in the Household	Children (108)	76.22	9.54	.01
	No Children (243)	54.73		

consumer willingness to first consult a pharmacist for head lice. These characteristics are age (p<.01), marital status (p<.01), race (p<.01), race group (p<.01), the presence or absence of dependent children in the household (p<.01), and income (p<.01). The categories of income did not result in a significant relationship with consumer willingness to first consult a pharmacist until the category of below $10,000 was isolated from the others. A closer examination of the table reveals that consumers who are most likely to first consult a pharmacist for head lice are those aged 18 to 54 years; nonwidowed; white; with dependent children living in the household; and with annual family incomes of $10,000 and above.

Table 5-39 indicates that there are significant relationships between four demographic characteristics and consumer willingness to first consult a pharmacist for corns and warts. These characteristics are age (p<.01), marital status (p<.01), the presence or absence of dependent children in the household (p<.01), and income (p<.01). Again, income did not result in a significant relationship with consumer willingness to first consult a pharmacist until the category of below $10,000 was isolated from the others. A closer examination of the table reveals that consumers who are most likely to first consult a pharmacist for corns and warts are those aged 18 to 54 years; nonwidowed; with dependent children living in

Table 5-39 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Corns and Warts

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Age Group	18-24 (53)	73.58	52.13	.01
	25-54 (176)	69.32		
	55-64 (48)	45.83		
	Over 64 (77)	24.68		
Race	White (313)	59.11	4.43	.11
	Black (28)	46.31		
	Hispanic (14)	35.71		
Race Group	White (313)	59.11	3.99	.05
	Nonwhite (42)	42.86		
Education	Elementary School (36)	44.24	11.84	.02
	High School (141)	50.35		
	Some College (92)	66.30		
	College (60)	58.33		
	Post College (25)	76.00		
Income	Under $10,000 (81)	43.21	11.70	.02
	$10,001-$30,000 (145)	60.00		
	$30,001-$50,000 (87)	66.67		
	$50,001-$75,000 (12)	75.00		
	Over $75,000 (8)	62.50		

Table 5-39--continued.

Item	Response (N)	Willingness (yes) %	χ^2	p<
Income	Below $10,000 (81)	43.21	9.97	.01
	$10,000 and Above (252)	63.10		
Single Member Household	Single (82)	45.12	6.26	.02
	Nonsingle (270)	60.74		
Health Status	Excellent (158)	60.76	1.56	.67
	Good (155)	54.19		
	Fair (36)	55.56		
	Poor (6)	50.00		
Sex	Male (119)	58.82	.16	.69
	Female (235)	56.60		
Marital Status	Single (86)	65.12	14.70	.01
	Married (213)	59.15		
	Divorced (15)	53.33		
	Widowed (40)	30.00		
Dependent Children in the Household	Children (106)	74.53	18.53	.01
	No Children (247)	49.80		

the household; and with annual family incomes of $10,000 and above.

It was again expected that age might be confounding the results of marital status and the presence of dependent children in the household. Further tests of significance were performed while controlling for age. Age again was divided into two groups, 18 to 54 years and 55 years and above. When marital status and the presence of dependent children were tested under these two age categories, there were no significant relationships between these groups of consumers and whether they would first consult with a pharmacist regarding either head lice or corns and warts.

Table 5-40 indicates that there is a significant relationship between two demographic characteristics and consumer willingness to first consult a pharmacist for fluoride vitamins. These are age ($p<.01$) and marital status ($p<.01$), where consumers aged 18 to 54 and nonwidowed were found to be the most likely to first consult a pharmacist.

b. Consumer reactions to the bottom three health ailments (pinworms, nausea and vomiting, and burning urination).

As seen in Table 5-41, there are significant relationships between two demographic characteristics and consumer willingness to first consult a pharmacist for pinworms. These are age ($p<.01$) and income ($p<.01$). Once

Table 5-40 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Fluoride Vitamins

Item	Response (N)	Willingness (yes) %	χ^2	p<
Age Group	18-24 (53)	77.36	34.75	.01
	25-54 (175)	64.00		
	55-64 (46)	43.48		
	Over 64 (68)	30.88		
Race	White (298)	58.72	4.59	.10
	Black (31)	38.71		
	Hispanic (14)	57.14		
Race Group	White (298)	58.72	3.25	.08
	Nonwhite (145)	44.44		
Education	Elementary School (36)	41.67	7.71	.11
	High School (131)	56.49		
	Some College (93)	62.37		
	College (61)	52.46		
	Post College (20)	75.00		
Income	Under $10,000 (75)	49.33	5.23	.24
	$10,001-$30,000 (138)	56.52		
	$30,001-$50,000 (87)	60.92		
	$50,001-$75,000 (12)	75.00		
	Over $75,000 (9)	70.78		

Table 5-40--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Single Member Household	Single		2.05	.16
	(77)	49.35		
	Nonsingle			
	(263)	58.56		
Health Status	Excellent		2.97	.40
	(155)	57.42		
	Good			
	(148)	58.11		
	Fair			
	(35)	54.29		
	Poor			
	(5)	20.00		
Sex	Male		1.29	.26
	(113)	61.06		
	Female			
	(229)	54.59		
Marital Status	Single		16.59	.01
	(84)	65.48		
	Married			
	(207)	58.45		
	Divorced			
	(16)	56.25		
	Widowed			
	(35)	25.71		
Dependent Children in the Household	Children		4.75	.03
	(109)	65.14		
	No Children			
	(232)	52.59		

Table 5-41 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Pinworms

Item	Response (N)	Willingness (yes) %	χ^2	p<
Age Group	18-24 (49)	20.41	18.85	.01
	25-54 (176)	39.20		
	55-64 (47)	36.17		
	Over 64 (77)	14.29		
Race	White (308)	32.47	3.26	.20
	Black (29)	11.24		
	Hispanic (13)	23.08		
Race Group	White (308)	32.47	3.12	.08
	Nonwhite (42)	19.05		
Education	Elementary School (39)	17.95	6.33	.18
	High School (137)	28.47		
	Some College (91)	31.87		
	College (59)	37.29		
	Post College (23)	43.48		
Income	Under $10,000 (78)	17.95	10.23	.04
	$10,001-$30,000 (151)	31.79		
	$30,001-$50,000 (81)	39.51		
	$50,001-$75,000 (11)	45.45		
	Over $75,000 (8)	37.50		

Table 5-41--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Income	Below $10,000 (78)	17.95	8.15	.01
	$10,000 and Above (251)	35.06		
Single Member Household	Single (80)	33.75	.41	.52
	Nonsingle (267)	29.96		
Health Status	Excellent (156)	32.69	3.37	.34
	Good (153)	11.37		
	Fair (35)	25.71		
	Poor (6)	0.00		
Sex	Male (115)	27.83	.78	.38
	Female (234)	32.48		
Marital Status	Single (83)	32.53	2.90	.41
	Married (214)	32.24		
	Divorced (15)	27.67		
	Widowed (37)	18.92		
Dependent Children in the Household	Children (105)	37.14	2.97	.09
	No Children (244)	27.87		

again, income did not result in a significant relationship with consumers who would first consult a pharmacist until the category of below $10,000 was isolated from the others. A closer examination of the table reveals that consumers who are the most likely to first consult a pharmacist for pinworms are those who are aged 25 to 64 years and have annual family incomes of $10,000 and above.

As indicated in Table 5-42, there is a significant relationship between one demographic characteristic and consumer willingness to first consult a pharmacist for nausea and vomiting. This is education ($p<.01$) where consumers with increasing levels of education are more likely to first approach a pharmacist concerning nausea and vomiting.

The health condition for which consumers reported overall that they would be least likely to first consult a pharmacist was burning urination. However, Table 5-43 shows that no demographic characteristics resulted in a significant relationships with consumer willingness to first consult a pharmacist for this condition.

Respondent Comments

During the interviewing process, notes were taken to document any thoughts, feelings, or comments the respondents expressed concerning the study. Most of the

Table 5-42 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Nausea and Vomiting

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Age Group	18-24 (53)	24.53	2.36	.50
	25-54 (179)	23.46		
	54-64 (52)	23.08		
	65 and over (88)	15.91		
Race	White (330)	21.82	.35	.84
	Black (30)	23.33		
	Hispanic (13)	15.38		
Race Group	White (330)	21.82	.02	.89
	Nonwhite (43)	20.93		
Education	Below High School (40)	15.00	17.04	.01
	High School (153)	15.03		
	Some College (92)	27.17		
	College (62)	24.19		
	Post College (25)	48.00		
Income	Under $10,000 (86)	12.79	9.64	.05
	$10,001-$30,000 (157)	23.57		
	$30,001-$50,000 (86)	25.58		
	$50,001-$75,000 (13)	23.08		
	Over $75,000 (10)	50.00		

Table 5-42--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Single Member Household	Single (86)	16.28	2.10	.15
	Nonsingle (283)	23.67		
Health Status	Excellent (164)	23.78	4.74	.20
	Good (163)	18.40		
	Fair (40)	30.00		
	Poor (6)	0.00		
Sex	Male (125)	21.60	.01	.96
	Female (247)	21.86		
Marital Status	Single (84)	19.05	3.05	.39
	Married (228)	24.56		
	Divorced (15)	13.33		
	Widowed (45)	15.56		
Dependent Children in the Household	Children (110)	28.18	3.69	.06
	No Children (261)	19.16		

Table 5-43 Statistical Summary for Consumer Demographic Characteristics and Willingness to First Consult a Pharmacist for Burning Urination

Item	Response (N)	Willingness (yes) %	χ^2	p<
Age Group	18-24 (54)	11.11	3.35	.35
	25-54 (186)	6.99		
	55-64 (52)	11.54		
	65 and over (88)	4.55		
Race	White (338)	7.99	.85	.66
	Black (30)	3.33		
	Hispanic (13)	7.69		
Race Group	White (338)	7.99	.60	.44
	Nonwhite (43)	4.65		
Education	Elementary School (41)	14.63	4.33	.37
	High School (151)	5.96		
	Some College (100)	9.00		
	College (63)	6.35		
	Post College (25)	4.00		
Income	Below $10,000 (85)	7.06	3.15	.54
	$10,001-$30,000 (162)	6.17		
	$30,001-$50,000 (89)	12.36		
	$50,001-$75,000 (12)	8.33		
	Over $75,000 (10)	10.00		

Table 5-43--continued.

Item	Response (N)	Willingness (yes)		
		%	χ^2	p<
Single Member Households	Single (88)	5.68	.65	.42
	Nonsingle (289)	8.30		
Health Status	Excellent (167)	12.57	10.69	.02
	Good (167)	4.19		
	Fair (40)	2.50		
	Poor (7)	0.00		
Sex	Male (130)	6.15	.61	.44
	Female (250)	8.40		
Marital Status	Single (89)	8.99	.76	.86
	Married (233)	7.73		
	Divorced (16)	6.25		
	Widowed (42)	4.76		
Dependent Children in the Household	Children (113)	6.19	.48	.49
	No Children (266)	8.27		

positive comments concerning the prescribing law can be summarized as follows:

... a great way to save time and money.

... more responsibility for the pharmacist.

... pharmacists are very qualified.

... pharmacists explain things more completely then doctors.

... pharmacists are very helpful.

... a good law for when the physician is unavailable.

... has more confidence in her pharmacist than in her physician when it comes to drugs.

... would allow her pharmacist to prescribe, but not others.

... likes pharmacists' qualifications.

... trusts her pharmacist and would have to learn to trust another one.

... feels pharmacists are qualified, but doesn't have one herself.

Similarly, most of the negative comments can be summarized as follows:

... pharmacist prescribing should be tightly regulated.

... has had a bad experience with a pharmacist.

... doesn't like pharmacists.

... pharmacists are not qualified and need extra training.

... the pharmacist doesn't know the whole patient.

... very satisfied with her physician--no need for a pharmacist.

... doesn't trust pharmacists--hopes the study will reverse the law.

Many respondents indicated neutral feelings concerning the prescribing law. Most of these comments can be summarized as follows:

... prescribing depends on the pharmacist.

... approves of the law, loves her pharmacist, but prefers her physician because of her high blood pressure.

... favors the law, but feels that her pharmacist doesn't have the time.

... it depends on the pharmacist's credentials.

... a good law, provided the pharmacist is informed.

... it depends on the problem--only minor problems.

... feels it will be difficult for people to get used to the idea of pharmacists prescribing.

... trusts some pharmacists but not all.

... depends on the confidence you have in the pharmacist.

... depends on the competence of the pharmacist.

... the law is too new to decide.

... pharmacist prescribing depends on individual qualifications.

... the competence of the pharmacist depends on the company where he works.

Some respondents indicated personal thoughts and feelings concerning the payment of a consultation fee. Most of these comments can be summarized as follows:

... a fee depends on the time and extent of the evaluation.

... a fee is okay if it is less than the cost of a physician visit.

... if you pay a fee, you may as well see a physician.

... pharmacists are paid by the company and physicians work for themselves.

... consultation is part of the pharmacist's job.

... a fee is already being paid by using the pharmacy--it would be like paying the mechanic extra to change your oil.

... the law will save money, but not with a fee.

... believes the law is a step in the right direction, but the fee isn't.

... against the fee--the store gains anyway.

Many respondents reported personal thoughts and feelings concerning the health needs for which pharmacists may prescribe. Most of these comments can be summarized as follows:

... it is nice to know the conditions for which pharmacists may prescribe.

... the public should be made aware of the law.

... the law is okay, but in a limited capacity.

... prefers the pharmacist over the physician for many questions.

... a physical examination is needed and pharmacists can't do that.

... the pharmacist doesn't have the whole picture.

... some of the conditions may require a physician.

... some pharmacists will over-extend themselves, playing doctor.

... trusts her pharmacists for minor things, but feels that some things could be more serious.

... believes in self-treatment.

CHAPTER VI
SUMMARY AND CONCLUSIONS

Summary of Results

Over half of the respondents were aware of the existence of the law at the time of the interview. But only one-third of these respondents (or one-fifth of the entire sample) considered themselves to be well informed about the law and its limitations. When this latter group of respondents was tested for the accuracy of their knowledge, they appeared to be relatively well informed.

Those respondents who were not aware of the existence of the law were provided information about the law during the course of the interview. Later, all respondents were asked about their feelings concerning the scope of the law. Almost half of the respondents indicated that, in their opinion, the law is sufficient as it stands. Some respondents felt that the pharmacist's authority to prescribe should be expanded and other respondents thought that it should be more restrictive.

The consumers in this study can be categorized into two groups. The first group has a favorable attitude toward pharmacist prescribing since they view the law as a convenience and as a way to save the costs of physician visits for many minor ailments. The second group prefers to stay in close touch with their physicians, whom they would rather consult first, regarding their health care.

It was anticipated that, if consumers perceive their physicians as being unavailable and not easily accessible, or fear a burden of monetary cost in visiting their physicians, they might be more likely to rely upon a pharmacist as an alternate health care provider. In addition, it was anticipated that if consumers are apprehensive regarding the cost of the time spent waiting to see their physicians, or if they are not satisfied with their present level of physician care, then they also might be more likely to rely upon a pharmacist as an alternate health care provider. The data did not support any of the hypotheses concerning patient-physician relationships. That is, when consumers' relationships with their physicians were examined, those who expressed dissatisfaction were not more likely to approve of the law or to allow a pharmacist to prescribe for them.

In contrast, the data provided partial support for the hypotheses concerning patient-pharmacist relationships. It was hypothesized that if consumers perceive pharmacists as available, helpful, competent and/or having a strong bond with a pharmacist (defined as a personal working relationship), then they would be more likely to accept pharmacists in a prescribing role. Consumers, who (1) feel they can reach a pharmacist over the telephone (pharmacist availability), (2) feel comfortable in asking a pharmacist for advice or information (pharmacist helpfulness), and (3) trust a pharmacist's recommendations and advice (pharmacist competence), are more likely to approve of the law and to allow a pharmacist to prescribe for them in the future. However, if a consumer has a bond with one pharmacist, it is not a positive indication that he will allow his pharmacist to prescribe for him.

When consumer demographic characteristics were analyzed, none of the hypothesized relationships were supported. However, age was related with consumer intent to allow a pharmacist to prescribe, but not as hypothesized. It was the younger, rather than the older, individuals who indicated they would allow pharmacists to prescribe for them.

The study results also indicated that nonwidowed individuals and individuals from households with dependent children are more likely to allow a pharmacist to prescribe for them, but only the nonwidowed individuals are more likely to also approve of the law.

When consumer health status was examined, it was not found to be related with either consumer approval of the law or consumer intent to allow a pharmacist to prescribe for them in the future.

When the respondents were presented 12 different health conditions for which pharmacists are allowed to prescribe and asked whether they would first consult a pharmacist or a physician, they indicated a pharmacist for five of the conditions and a physician for seven of the conditions. These health conditions are presented on page 95 in the order of respondent indications that they would first consult a pharmacist.

The demographic characteristics of consumers who would first consult a pharmacist for each of the three conditions at the top of the list were analyzed. The results showed many similarities regarding these characteristics. Consumers who would first consult a pharmacist for head lice were found to be aged 18 to 54 years, nonwidowed, white, with dependent children in the household, and with annual family incomes above $10,000. Consumers who would first consult a pharmacist for corns and warts were found to be aged 18 to 54 years, nonwidowed, with dependent children in the household, and with annual family incomes above $10,000. Consumers who would first consult a pharmacist for fluoride vitamins were found to be aged 18 to 54 years and nonwidowed.

The demographic characteristics of consumers who would first consult a pharmacist for each of the three health conditions at the bottom of the list were also analyzed. Consumers who would first consult a pharmacist for pinworms were found to be aged 25 to 64 years and have annual family incomes above $10,000. Consumers who would first consult a pharmacist for nausea and vomiting were found to be the most highly educated. Those consumers who would first consult a pharmacist for burning urination could not be easily differentiated, as very few respondents reported that they would consult a pharmacist for this condition.

As reported, many respondents indicated that they would not first consult a pharmacist for the health conditions. Considering the conditions of head lice and corns and warts, these individuals were found to be aged 65 and over, widowed, and with annual family incomes below $10,000. Possibly, these individuals remain in close touch with their physicians.

In the aggregate, the list of minor health conditions for which pharmacists may prescribe might include conditions that consumers perceive as being too serious for anything but treatment from a physician. Perhaps consumers view these ailments as symptoms of major illness rather than as minor and self-limiting conditions. However, a limitation of this study is that the findings are based on self-reports of the respondents who may or may not act in the manner they indicate. That is, an individual who develops one of these symptoms at a time when a physician is not available, might seek the services of another type of health care professional who is available.

Pharmacists typically do not charge a professional fee for providing health information or advice. This study provides information concerning consumer acceptance of this practice. Toward the close of the interview, those respondents, who said that they were willing to have a pharmacist prescribe for them, were asked if they would also be willing to pay a fee to the pharmacist for a consultation resulting in a prescribed drug, a recommendation of an OTC drug, and a referral to a physician.

Again, most of the respondents can be categorized into two groups. One group is willing to pay a small fee to the pharmacist and views the fee as a way to save the cost of a physician visit for many minor ailments. The other group views the consultation fee as "another expense." These consumers feel "taken advantage of" and would prefer to visit a physician and to pay the fee to him instead. Many respondents reported that they are willing to pay the fee in the cases presented to them; but, more consumers under the age of 55 than those over the age of 55 were found to be willing to pay a consultation fee if the pharmacist prescribes a drug or recommends an OTC drug.

After the respondents were asked if they would be willing to pay a consultation fee, they were asked whether they would allow a pharmacist to prescribe for them if their insurance company would assume the cost. The purpose of this question was to determine if the cost of a fee was the primary reason that respondents would not ask a pharmacist to prescribe. That is, one group of consumers might object to paying a fee because of the expense, while another group of consumers might simply feel that a fee is not warranted.

As expected, the greatest number of respondents reported that they would be willing to avail themselves of a pharmacist's prescribing services under this condition. However, the only significant demographic characteristics of these consumers were age and income, where individuals aged 18 to 54 years and with annual family incomes below $50,000 were found to be the most willing to allow a pharmacist to prescribe for them if a third party would assume the fee.

When the respondents under the age of 55 were analyzed separately, approximately 50% of those who said they would allow a pharmacist to prescribe for them also indicated that they would be willing to pay the consultation fee. However, approximately 70% of them reported that they would allow a pharmacist to prescribe for them if a third party would, instead, assume these costs. Obviously, some consumers do not approve of the concept of a pharmacist's consultation fee.

The group of consumers that were found to be the least willing to allow a pharmacist to prescribe for them if a third party were to assume the cost were found to be the older individuals and the individuals from upper income levels. That is to say, these individuals, also, do not feel that a fee to the pharmacist is warranted. Although the cell sizes of these groups were relatively small, there was, nevertheless, a distinct percentage-wise difference.

It was necessary to analyze the consumer attitudes toward pharmacists in more detail. Three statements measuring consumer attitude toward pharmacists resulted in significant relationships with acceptance of pharmacist prescribing, while other statements, logically related to them, did not. These statements are

Item 39 "I feel comfortable in asking my pharmacist (a pharmacist) for advice or information."

Item 41 "My pharmacist (most pharmacists) will talk to me over the telephone when I call."

Item 44 "I trust my pharmacist's (most pharmacists') recommendations and advice."

Originally, the test of Cronbach's alpha had indicated that Item 39 be grouped with other statements labeled as measuring pharmacist helpfulness. The other two statements presented above could not be grouped, either together, or with any others in any logical manner, without resulting in a deficient alpha value when forming the scales.

An additional test of Cronbach's alpha was performed in order to assess the internal consistency of a new scale comprised of only these three items. The inter-item correlations of the items ranged from 0.38 to 0.50 with a scale alpha of 0.62. It was apparent that these items as a separate scale may be measuring a different construct concerning pharmacists from the original attitude scale of "pharmacist helpfulness." But there does not appear to be an easily identifiable label.

Respondent scores were summated for this new scale. The scores were also summated for the former scales measuring consumer attitudes toward physicians (physician availability, access to a physician, monetary cost of visiting a physician, cost of time in visiting a physician, and satisfaction with physicians) and the scale measuring the presence of a pharmacist bond. Point biserial correlations were then performed between these summated scores and consumer approval of the law and consumer intent to allow a pharmacist to prescribe for them. Point biserial correlations were also performed between other variables describing the respondents and the dependent measures. The other variables were respondent age, number of years seeing present physician, number of physician visits in the past year, number of years trading with the present pharmacy, number of times having asked a pharmacist for information or advice in the past year, and years of college believed required of pharmacists.

Tables D-1 and D-2 of Appendix D show that the results are consistent with those of the former analyses that employed the tests of chi square. Respondent age resulted in a correlation of -.16 ($p<.0004$) with approval of the law and -.20 ($p<.0003$) with willingness to allow a pharmacist to prescribe. Consumer attitudes toward physicians did not result in significant correlations with either their approval of the law or their willingness to allow a pharmacist to prescribe for them. The presence of a patient-pharmacist bond likewise did not result in a significant correlation with the dependent measures. However, the newly created scale resulted in a correlation of .22 ($p<.0001$) with consumer approval of the law and .25 ($p<.0001$) with consumer willingness to allow a pharmacist to prescribe for them in the future. Interestingly, the number of times that respondents had asked a pharmacist for advice or information in the past year also resulted in a significant positive correlation with their approval of the law ($r=.17$, $p<.0015$) and with their willingness to allow a pharmacist to prescribe for them ($r=.20$, $p<.0002$). All other variables examined resulted in no significant correlations with the dependent measures.

Conclusions

More than half of the respondents in the study sample (58.5%) indicated that they feel pharmacists are qualified to prescribe prescription drugs. A substantial majority of the respondents (72.3%) reported that they approve of the law. In addition, almost as many (68.5%) reported that they would be willing to allow a pharmacist to prescribe for them in the future. Statistically, the consumers most likely to accept pharmacist prescribing are aged 18 to 54, nonwidowed, and have dependent children in the home. These are the individuals who have favorable attitudes toward pharmacists when measured on the new scale and who are more likely to approach a pharmacist for information and advice. These are also the individuals who reported that they would first consult a pharmacist for many of the minor health ailments that were presented to them. Obviously, as young families, they would be the most concerned with treating head lice and dental cavities.

The results of this study indicate that consumers are not gravitating toward pharmacists because of some dissatisfaction with physicians. In addition, consumers who have a bond with a pharmacist, likewise, will not automatically accept him in a prescribing role. Rather, the findings indicated that those consumers, who appear to seek a pharmacist's advice more often, are the ones who approve of the law and would allow a pharmacist to prescribe for them in the future.

Most of the respondents who knew of the law's existence reported having learned about it from the news media. Few had learned about the law from a pharmacist. However, a limitation of this study was that the data were collected approximately at the time the law went into effect. Obviously, more consumers will learn about the law as time passes. Based on the finding that those consumers who approach a pharmacist for advice most frequently are those who would accept him in a prescribing role, one might expect that these consumers would begin to learn more about the law from their pharmacists. However, it is not known if pharmacists will begin to actively promote their new services or if they will offer their services only in response to a consumer's request.

Half (50.0%) of the respondents indicated that they are not willing to pay a consultation fee to a pharmacist who prescribes a drug for them. However, almost half (42.7%) reported that they would be willing to pay a fee for this service. Statistically, these consumers appeared to be under the age of 55, the same age group that is more accepting of pharmacist prescribing. The median and mode amounts consumers reported that they would be willing to pay were $10.00. This was found to be the case whether the pharmacist were to prescribe a drug, recommend an OTC drug, or recommend that the patient consult a physician. Apparently, the consumers who would accept pharmacist prescribing also value the pharmacist's time and expertise. Therefore, pharmacists have an economic incentive to prescribe in addition to their desire to provide expanded patient care.

It seems apparent that those consumers who accept pharmacist prescribing tend to be more involved with self-medication. That is, they appear to rely more on the use of OTC drugs than on visits to physicians. However, from this, one might expect to find a significant negative correlation between the number of physician visits and consumer acceptance of pharmacist prescribing. But, this was not found.

Again, additional analyses were performed in order to investigate further. These involved product-moment correlations that were generated among respondent age, number of physician visits in the past year, number of times seeking a pharmacist's advice in the past year, bond with a pharmacist, and pharmacist accessibility.

Table D-3 of Appendix D presents some additional findings. As expected, respondent age resulted in a correlation of -.14 ($p<.0055$) with the number of times having asked a pharmacist for advice in the past year. Yet, the older the consumers, the closer are the bonds with their pharmacists ($r=.14$, $p<.0155$). In addition, there is a positive correlation between the presence of a pharmacist bond and the new attitude toward the pharmacist ($r=.4454$, $p<.0001$). There is also a positive correlation between the new attitude concerning the pharmacist and the number of times consumers have asked him for advice in the past year ($r=.2064$, $p<.0001$). And, there is a positive correlation between the number of times consumers have asked a pharmacist for advice in the past year and the presence of a pharmacist bond ($r=.2417$, $p<.0001$). Yet, there is no significant correlation between the presence of a pharmacist bond and either consumer approval of the law or consumer willingness to allow a pharmacist to prescribe for them in the future.

Rather than exclusively self-medicating, the consumers who would accept pharmacist prescribing might be more broadly practicing self-care. If this were true, then they probably consult with a pharmacist from time to time, but also visit a physician when necessary. This might explain the above situations.

It seemed reasonable to hypothesize that the group of consumers having a bond with one pharmacist is composed of both, consumers who are practicing self-care and consumers who are strictly under the care of a physician. As shown in Table D-4, when age was controlled, it was, indeed, found that consumers under the age of 55 who have bonds with their pharmacists are also more likely to approve of the law ($r=.2658$, $p<.0003$), as well as allow their pharmacists to prescribe for them ($r=.2877$, $p<.0001$). Yet, consumers aged 55 and above who have developed bonds with their pharmacists, do not necessarily approve of the law (r=.0250, p<.8043) or would allow their pharmacists to prescribe for them (r=.0169, p<.8627).

The data suggest that the older consumers may have developed bonds with their pharmacists by interacting with them in the course of obtaining their prescriptions. In contrast, the younger consumers may have developed bonds with their pharmacists through the course of seeking health information and advice. Yet, the older consumers do not necessarily accept their pharmacists in a prescribing role. If the above analysis is true, then the law is likely to benefit those consumers who already are involved in self-care. Older consumers, in general, are not ready to accept their pharmacists in a prescribing role.

Public Policy Implications

Proponents of the Florida Self-Care Consulting Law have argued that it will improve consumer access to health care advice and that it will help to contain health care costs. These arguments are based upon the premise that consumers will be more likely to seek the advice of pharmacists instead of relying solely on self-diagnosis and treatment. As a result, minor health problems will be treated more quickly and more appropriately. In addition, it is argued that patients will obtain medical care from physicians more promptly, because pharmacists will refer them to physicians when such action is appropriate.

This study concludes with three important public policy implications. First, much of the public still needs to be informed that pharmacists now are allowed to prescribe certain legend drugs. The public also must become familiar with the conditions for which pharmacists are allowed to prescribe and the limitations of their prescribing. It is possible that the segment of consumers most likely to accept pharmacist prescribing is comprised of those individuals who rely on self-care.

Second, a large number of pharmacists from all geographic areas must participate in the prescribing role. If the consumers who are likely to utilize pharmacist prescribing are relying on self-care, then they must be able to approach their pharmacists in any community setting for their health care needs. Obviously, the greater the number of pharmacists who choose to engage in prescribing, then the greater the number of consumers who can be helped. Pharmacists who are concerned about the time and cost of providing these services should be aware that many consumers are willing to pay a consultation fee for such prescribing services.

Third, this study has found that consumers who feel comfortable in asking a pharmacist for information or advice, who can talk to their pharmacists over the telephone, and who trust their pharmacist's recommendations and advice, are the most likely to accept them in a prescribing role. Therefore, pharmacists should strive to see that their customers have a favorable attitude toward them in response to these three factors. As one respondent commented,

> . . . It is a great law, but it's all a matter of who you are dealing with. I judge a pharmacist by how he acts behind the counter.

Limitations

As already discussed, this study has a number of limitations. The data were collected from self-reports of the respondents. How they respond to a telephone interview may not indicate how they would act when the need arises.

Almost half of the respondents were not aware of the law at the time of the interview. Although the questionnaire was designed to inform and somewhat educate these respondents, they were nevertheless answering emotionally on impulse and thus might act differently under other circumstances. Many households do not have telephones. They were excluded from the sampling frame and their responses are not represented in these findings.

The sampling frame consisted of telephone numbers and not individual consumers. The person answering the telephone was interviewed. Thus, these findings might not generalize to the state population.

Some variables other than those identified may also have a relationship with consumer acceptance of pharmacist prescribing. Possibly personality traits, family background, or personal habits might influence attitudes and behaviors concerning pharmacists and their prescribing roles.

Suggestions for Future Research

The law was enacted in order to benefit the public. It now appears that the law will be effective if consumers are aware of how they can be helped from it and if their pharmacists are willing to engage in the prescribing function. Future studies might involve one of three routes. First, the present study might be repeated in one or two years. The findings reported here present base line information. Consumers might reveal different attitudes and intentions in the future after having become more familiar with the law or having had some experience with it.

Second, a new but similar study might be developed in order to explore the pharmacist-patient relationship in more detail. The present study has shown that patient relationships with their physicians do not have an effect on their acceptance of pharmacist prescribing, but some aspects of patient relationships with their pharmacists do have an effect. The newly developed study might explore the attitudes and behaviors of the consumer segment hypothesized in this study, the group of consumers which seems likely to practice self-care. This group might be helped more by public policy decisions if they are more clearly identified.

Third, a study might be conducted in order to determine whether, or to what extent, consumer health care costs are being reduced as a result of the law. The present study has hypothesized that those consumers who would utilize the law are practicing self-care. The law is intended to save them the time and expense of visiting a physician for many minor and self-limiting conditions. However, a pharmacist will refer them to a physician when and if he determines that their conditions are in need of medical treatment. If consumers receive such medical treatment more promptly, then, possibly, more costly complications can be avoided. Thus, the total cost savings that result from the law might have implications for the price of health insurance for everyone, as well as benefit individual consumers directly. At present, the extent of these savings can only be speculated.

APPENDIX A
PILOT QUESTIONNAIRE

HELLO, I'M ____________________ FROM THE UNIVERSITY OF FLORIDA. WE'RE DOING A STUDY TO HELP US FIND WAYS TO CUT HEALTH CARE COSTS AND WE'D LIKE TO GET YOUR OPINION. iT'L TAKE ABOUT 10 MINUTES OF TOYR TIME, BUT WE DO NEED YOUR HELP.
(Verify that the person is over I8.)
THE FIRST QUESTION IS...

1. DO YOU HAVE ONE PHARMACY WHERE YOU TRADE MOST OF THE TIME?

(circle one) yes 1
no (go to Q4)...................2 1

If "yes" use the specific case ("Your pharmacist...") for the attitudinal statements.

If "no" use the general case ("Pharmacists...") for the attitudinal statements.

2. WHAT IS THE NAME OF THE PHARMACY? ________________________________

(for coding purposes only) chain...............................1
independent.........................2
hmo/ppo.............................3 2
clinic..............................4
franchise...........................5
other...............................6

3. DO YOU KNOW THE NAME OF THE PHARMACIST WHO USUALLY HELPS YOU?

(circle one) yes...............................1 3
no................................2

4. HOW DO YOU NORMALLY PAY FOR YOUR PRESCRIPTIONS?
(circle one) cash (includes check and charge)...(GO to Q6)....1
private third party
(includes Blue Cross, HMO's, PPO's, and others)..2 4
(go to Q6)
federal or state aid...(go to Q6)................3
other (specify)__(ask Q6)________________________4

5. (If third party) DO YOU PAY CASH FOR ANY PART OF THE PRICE OF YOUR PRESCRIPTIONS?

(circle one)
yes....................................1 5
no....................................2

6. DO YOU HAVE A REGULAR DOCTOR THAT YOU GO TO WHEN YOU ARE ILL?

(circle one)
yes....................................1
no...(go to Q11).....................2 6

If "yes" use the specific case (YOUR DOCTOR...") for the attitudinal statements

If "no" use the general case (DOCTORS...") for the attitudinal statements.

7. WHAT TYPE OF PRACTICE DOES HE HAVE? FOR EXAMPLE, DOES HE PRACTICE ALONE, IN A GROUP, IN A CLINIC...?

(circle one)
private/solo..................1
hmo/ppo.......................2
group.........................3
clinic........................4 7
doc-in-the-box................5
other(specify) ________________6
don't know....................7

8. HOW DO YOU NORMALLY PAY FOR YOUR DOCTOR VISITS?

(circle one)
cash (includes check and charge)..(GO to Q10)........1
private third party
(includes Blue Cross, HMO's, PPO's and others).......2 8
(go to Q 10)
federal or state aid...(go to Q10)...................3
other (specify)_____(ask Q10)________________________4

9. (If third party) DO YOU PAY CASH FOR ANY PART OF THE PRICE OF YOUR PRESCRIPTIONS?

(circle one)
yes.......................1 9
no........................2

I'LL READ SOME STATEMENTS TO YOU. PLEASE TELL ME WHETHER YOU AGREE, DISAGREE, OR HAVE NO OPINION.

10. I USUALLY CAN GET AN APPOINTMENT WITH MY DOCTOR WITHIN 2 OR 3 DAYS.
(...WITH A DOCTOR WITHIN 2 OR 3 DAYS)

agree.......................1
no opinion..................2 10
disagree....................3

11. I USUALLY CAN SEE MY DOCTOR WITHOUT AN APPOINTMENT.
(...MOST DOCTORS)

agree.......................1
no opinion..................2 11
disgree.....................3

12. MY DOCTOR IS USUALLY AVAILABLE AFTER OFFICE HOURS (EVENINGS AND WEEKENDS).
(MOST DOCTORS ARE AVAILABLE...)

agree.......................1
no opinion..................2 12
disagree....................3

13. MY DOCTOR WILL TALK TO ME OVER THE PHONE WHEN I CALL.
(MOST DOCTORS WILL TALK TO ME OVER THE PHONE...)

agree.......................1
no opinion..................2 13
disagree....................3

14. GETTING TRANSPORTATION TO MY DOCTOR'S OFFICE CAN BE A PROBLEM FOR ME.
(...TO A DOCTOR'S OFFICE)

agree.......................1
no opinion..................2 14
disagree....................3

15. MY DOCTOR DOESN'T LIKE TO BE BOTHERED UNLESS IT IS REALLY NECESSARY.
(MOST DOCTORS DO NOT LIKE ...)

agree.......................1
no opinion..................2 15
disagree....................3

16. I HAVE TO WAIT ENTIRELY TOO LONG IN THE OFFICE WHEN I GO TO SEE MY DOCTOR. (...WHEN I GO TO SEE MOST DOCTORS)

agree......................1
no opinion.................2 16
disagree...................3

17. I AM SATISFIED WITH THE AMOUNT OF TIME MY DOCTOR SPENDS WITH ME. (...THAT MOST DOCTORS SPEND WITH ME)

agree......................1
no opinion.................2 17
disagree...................3

18. MY DOCTOR SEEMS TO BE RUSHING ME WHEN HE TALKS TO ME. (MOST DOCTORS SEEM TO BE RUSHING ME ...)

agree......................1
no opinion.................2 18
disagree...................3

19. MY DOCTOR SPENDS EXTRA TIME WITH ME WHEN I NEED IT. (MOST DOCTORS SPEND EXTRA TIME WITH ME WHEN I NEED IT)

agree......................1
no opinion.................2 19
disagree...................3

20. MY DOCTOR NEVER GIVES ME A CHANCE TO TELL HIM EXACTLY WHAT MY TROUBLE IS. (MOST DOCTORS NEVER...)

agree......................1
no opinion.................2 20
disagree...................3

21. MY DOCTOR USES TERMS THAT I DON'T UNDERSTAND. (MOST DOCTORS USE TERMS ...)

agree......................1
no opinion.................2 21
disagree...................3

22. MY DOCTOR DOESN'T TELL ME ENOUGH ABOUT MY CONDITION
(MOST DOCTORS DON'T...)

agree......................1
no opinion.................2 22
disagree...................3

23. MY DOCTOR WILL TELL ME FRANKLY IF HE DOESN'T KNOW WHAT MY TROUBLE IS.
(MOST DOCTORS WILL TELL ME FRANKLY ...)

agree......................1
no opinion.................2 23
disagree...................3

24. I AM ALWAYS AFRAID THAT MY DOCTOR WILL PRESCRIBE MEDICINE FOR
ME THAT IS TOO EXPENSIVE
(...THAT DOCTORS WILL PRESCRIBE...)

agree......................1
no opinion.................2 24
disagree...................3

25. I HAVE TO LOSE PAY WHEN I TAKE TIME OFF FROM WORK TO SEE MY DOCTOR.
(...IN ORDER TO SEE A DOCTOR)

agree......................1
no opinion.................2 25
disagree...................3

26. TRANSPORTATION COSTS ME TOO MUCH WHEN I GO TO SEE MY DOCTOR.
(... WHEN I GO TO SEE A DOCTOR)

agree......................1
no opinion.................2 26
disagree...................3

27. MY DOCTOR'S OFFICE IS CONVENIENTLY LOCATED.
(A DOCTOR'S OFFICE IS ...)

agree......................1
no opinion.................2 27
disagree...................3

28. I HAVE TO TRAVEL MORE THAN 30 MINUTES EACH WAY IN ORDER TO SEE MY DOCTOR. (...IN ORDER TO SEE A DOCTOR)

agree......................1
no opinion.................2 28
disagree...................3

29. MY TIME IS TOO VALUABLE FOR ME TO SPEND IT WAITING AROUND IN A DOCTOR'S OFFICE.

agree......................1
no opinion.................2 29
disagree...................3

(Skip questions 36, 37, & 38 for people who use HMO's, PPO's, Medicaid or Medicare.)

30. MY DOCTOR CHARGES A SEPARATE FEE FOR EACH TIME I CONTACT HIM, EVEN IF IT IS ONLY FOR A PHONE CALL.
(MOST DOCTORS CHARGE A SEPARATE FEE...)

agree......................1
no opinion.................2 30
disagree...................3

31. MY DOCTOR VISITS ARE TOO EXPENSIVE FOR ME.
(DOCTOR VISITS ARE ...)

agree......................1
no opinion.................2 31
disagree...................3

32. MY DOCTOR'S FEES ARE TOO HIGH.
(MOST DOCTORS' FEES ARE ...)

agree......................1
no opinion.................2 32
disagree...................3

33. MY PHARMACIST WILL TALK TO ME OVER THE PHONE WHEN I CALL.
(MOST PHARMACISTS WILL ...)

agree......................1
no opinion.................2 33
disagree...................3

34. MY PHARMACIST DOESN'T TALK DIRECTLY TO ME
BUT USUALLY RELATES INFORMATION THROUGH HIS DRUG CLERK.
(MOST PHARMACISTS DON'T ...)

agree.......................1
no opinion..................2 34
disagree....................3

35. MY PHARMACIST SEEMS TO BE PERSONALLY CONCERNED FOR MY HEALTH.
(MOST PHARMACISTS SEEM TO BE ...)

agree.......................1
no opinion..................2 35
disagree....................3

36. MY PHARMACIST TRIES TO SAVE ME MONEY ON PRESCRIPTIONS.
(MOST PHARMACISTS TRY ...)

agree.......................1
no opinion..................2 36
disagree....................3

37. I TRUST MY PHARMACIST'S RECOMMENDATIONS AND ADVICE.
(...MOST PHARMACIST'S RECOMMENDATIONS AND ADVICE.)

agree.......................1
no opinion..................2 37
disagree....................3

38. I LIKE TO GET SOMEONE ELSE'S OPINION IN ADDITION TO
WHAT MY PHARMACIST TELLS ME.
(...IN ADDITION TO WHAT A PHARMACIST TELLS ME)

agree.......................1
no opinion..................2 38
disagree....................3

39. MY PHARMACIST APPEARS TO BE VERY PROFESSIONAL.
(MOST PHARMACISTS APPEAR...)

agree.......................1
no opinion..................2 39
disagree....................3

(Questions 47 through 50 are only for those respondents indicating a regular pharmacy.)

40. MY PHARMACIST KNOWS ME BY NAME.

agree......................1
no opinion.................2   40
disagree...................3

41. MY PHARMACIST USUALLY CALLS ME BY NAME WHEN HE SEES ME.

agree......................1
no opinion.................2   41
disagree...................3

42. MY PHARMACIST USUALLY WILL STOP WHAT HE IS DOING IN ORDER TO TALK TO ME.

agree......................1
no opinion.................2   42
disagree...................3

43. I CAN CONFIDE IN MY PHARMACIST.

agree......................1
no opinion.................2   43
disagree...................3

44. DID YOU KNOW THAT A NEW FLORIDA LAW ALLOWS PHARMACISTS TO PRESCRIBE CERTAIN PRESCRIPTION DRUGS?

(circle one) yes................................1
no...(go to Q60)....................2   44
don't know/uncertain..(go to Q60)...3

45. HOW DID YOU FIRST LEARN ABOUT THIS NEW LAW?
(Probe if necessary.)

(circle one)
newspaper repoer..................01
newspaper advertisement...........02
radio report......................03
radio advertisement...............04
television report.................05
radio advertisement...............06 45
television advertisement..........07 46
physician.........................08
pharmacist........................09
other health professional.........10
friend/relative...................11

46. HAS A (YOUR) PHARMACIST TALKED TO YOU OR GIVEN YOU WRITTEN INFORMATION ABOUT THIS NEW LAW?

(circle one) a. talked to you yes......1 47
no.......2

(circle one) b. given you written information yes......1 48
no.......2

47. HAS A (YOUR) DOCTOR TALKED TO YOU OR GIVEN YOU WRITTEN INFORMATION ABOUT THIS NEW LAW?

(circle one) a. talked to you yes......1 49
no.......2

(circle one) b. given you written information yes......1 50
no.......2

48. DO YOU CONSIDER YOURSELF TO BE WELL INFORMED ABOUT WHAT PHARMACISTS CAN DO UNDER THIS NEW LAW?

(circle one)
yes.........................1
no..........................2 51
uncertain...................3

49. WOULD YOU SAY THAT PHARMACISTS ARE ALLOWED TO PRESCRIBE FOR A LARGE NUMBER OR A SMALL NUMBER OF DIFFERENT HEALTH AILMENTS OR CONDITIONS?

(circle one)
large.......................1
small.......................2 52
don't know..................3

50. DO YOU THINK PHARMACISTS ARE ALLOWED TO PRESCRIBE DRUGS FOR LONG TERM OR SHORT TERM TREATMENT, OR BOTH?

(circle one)
long-term...................1
short-term..................2 53
both........................3
don't know..................4

51. DO YOU THINK THAT PHARMACISTS ARE ALLOWED TO PRESCRIBE ...

a. DRUGS FOR INJECTION?

(circle one)
yes...................1
no....................2 54
don't know............3

b. DRUGS FOR COLDS AND ALLERGIES?

(circle one)
yes...................1
no....................2 55
don't know............3

c. DRUGS FOR PIN WORMS?

(circle one)
yes...................1
no....................2 56
don't know............3

d. DRUGS FOR HIGH BLOOD PRESSURE?

(circle one)
yes...................1
no....................2 57
don't know............3

e. DRUGS FOR GENERAL ACHES AND PAINS?

(circle one) yes..................1
no...................2 58
don't know...........3

f. DRUGS FOR DIABETES?

(circle one) yes..................1
no...................2 59
don't know...........3

g. DRUGS FOR HEAD LICE?

(circle one) yes..................1
no...................2 60
don't know...........3

h. DRUGS FOR CORNS AND WARTS?

(circle one) yes..................1
no...................2 61
don't know...........3

i. DRUGS FOR INTERNAL INFECTIONS?

(circle one) yes..................1
no...................2 62
don't know...........3

j. DRUGS FOR SKIN RASHES?

(circle one) yes..................1
no...................2 63
don't know...........3

52. HAVE YOU ASKED A (YOUR) PHARMACIST TO PRESCRIBE A DRUG FOR YOU UNDER THIS NEW LAW?

(circle one) yes 1 64
no...(go to Q60)......2

53. HOW MANY TIMES HAVE YOU DONE THIS?
(enter # of times) _____ 65

54. DID HE ______________________________?

(enter # of times)
a. PRESCRIBE A DRUG FOR YOU? __________ 66
b. RECOMMEND A NON-PRESCRIPTION DRUG __________ 67
c. RECOMMEND THAT YOU SEE A DOCTOR? __________ 68

55. WHEN YOU ASKED A (YOUR) PHARMACIST TO PRESCRIBE A DRUG FOR YOU, WERE YOU...

(circle one)
VERY SATISFIED WITH THE RESULTS..............1
SOMEWHAT SATISFIED...........................2
NEUTRAL (neither satisfied nor dissatisfied).3 69
SOMEWHAT DISSATISFIED........................4
VERY DISSATISFIED............................5

56. DID YOUR PHARMACIST CHARGE YOU A FEE FOR HIS SERVICES IN ADDITION TO THE COST OF THE DRUG

(circle one)
yes..1
no ...(go to Q60)............................2 70

57. DO YOU REMEMBER HOW MUCH IT WAS?

(circle one)
yes..1
no....(go to Q60)............................2 71

58. HOW MUCH WAS IT?

(Enter dollar amount) $_____._____ 72, 73, 74

59 DO YOU THINK THE FEE WAS TOO LOW, TOO HIGH, OR ABOUT RIGHT?

(circle one)
too low......................................1
too high.....................................2 75
about right..................................3

60. HERE ARE SOME OF THE CONDITIONS FOR WHICH PHARMACISTS ARE ALLOWED TO PRESCRIBE. NORMALLY, WHO WOULD BE THE FIRST PERSON YOU WOULD CONSULT, A DOCTOR OR A PHARMACIST, IF YOU HAD ONE OF THESE CONDITIONS?

a. GENERAL ACHES AND PAINS	(circle one)	pharmacist............1 doctor................2 other response........3	76
b. URINARY PAIN	(circle one)	pharmacist............1 doctor................2 other response........3	77
c. EARACHE	(circle one)	pharmacist............1 doctor................2 other response........3	78
d. HEMORRHIDS	(circle one)	pharmacist............1 doctor................2 other response........3	79
e. LEG CRAMPS	(circle one)	pharmacist............1 doctor................2 other response........3	80
f. VITAMINS WITH FLUORIDE men: FOR DENTAL CAVITY PREVENTION women: FOR PRENATAL VITAMINS	(circle one)	pharmacist............1 doctor................2 other response........3	1
g. NAUSEA AND VOMITING	(circle one)	pharmacist............1 doctor................2 other response........3	2
h. ALLERGIES (SUCH AS STUFFY NOSE, HIVES, SNEEZING, HAYFEVER, ETC.)	(circle one)	pharmacist............1 doctor................2 other response........3	3
i. PINWORMS	(circle one)	pharmacist............1 doctor................2 other response........3	4

j.SKIN INFECTIONS AND RASHES (circle one)
pharmacist............1
doctor................2 5
other response........3

k.CORNS AND WARTS (circle one)
pharmacist............1
doctor................2 6
other response........3

l.HEAD LICE (circle one)
pharmacist............1
doctor................2 7
other response........3

61. DO YOU FEEL IT'S A GOOD IDEA TO HAVE A LAW THAT ALLOWS PHARMACISTS TO PRESCRIBE PRESCRIPTION DRUGS?

(circle one)
yes...................................1
no....................................2 8
don't know/not sure...................3

62. DO YOU THINK THE LAW IS OK AS IT STANDS OR WOULD YOU GIVE THE PHARMACIST MORE OR LESS AUTHORITY TO PRESCRIBE?

(circle one)
more..................1
less..................2 9
law ok as it stands...3
no opinion/not sure...4

63. WOULD YOU LET YOUR PHARMACIST PRESCRIBE FOR YOU IN THE FUTURE?

(circle one)
yes...................................1
no....................................2 10
uncertain.............................3

64. IF THE PHARMACIST EVALUATED YOUR CONDITION AND PRESCRIBED A DRUG FOR YOU, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one)
yes...................................1 11
no....(go to Q66).....................2

65. HOW MUCH WOULD YOU CONSIDER TO BE REASONABLE? LET ME GIVE YOU SOME BRACKETS TO HELP.

(circle one)
UP TO $2.00...........................1
$2.00 TO $5.00........................2 12
.OVER $5.00...........................3
uncertain.............................4

66. WHAT IF HE INSTEAD RECOMMENDED AN OVER-THE-COUNTER DRUG, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one) yes....................................1 13
no....(go to Q68).......................2

67. HOU MUCH WOULD YOU CONSIDER TO BE REASONABLE?

(circle one) UP TO $2.00............................1
$2.00 TO $5.00.........................2 14
OVER $5.00.............................3
uncertain..............................4

68. WHAT IF HE INSTEAD RECOMMENDED THAT YOU SEE A DOCTOR, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one) yes....................................1
no....(go to Q70).......................2 15
no, but would return with the rx
(go to Q70)............................3

69. HOW MUCH WOULD YOU CONSIDER TO BE REASONABLE?

(circle one) UP TO $2.00............................1
$2.00 TO $5.00.........................2 16
OVER $5.00.............................3
uncertain..............................4

70. IF YOUR INSURANCE COMPANY PAID THE PHARMACIST, WOULD YOU BE MORE LIKELY TO TAKE ADVANTAGE OF HIS PRESCRIBING SERVICES?

(circle one) yes....................................1
no.....................................2 17
uncertain..............................3

71. HOW WOULD YOU RATE YOUR OVERALL HEALTH FOR A PERSON OF YOUR AGE? WOULD YOU SAY THAT IT IS...

(circle one) EXCELLENT..............................1
GOOD...................................2 18
FAIR...................................3
OR POOR?...............................4

72. DURING THE PAST YEAR, ABOUT HOW MANY TIMES DID YOU ASK A (YOUR) PHARMACIST FOR ADVICE CONCERNING OVER-THE-COUNTER DRUGS OR HEALTH INFORMATION?

(enter # of times) ____________ 19, 20

73. SINCE LAST MAY, WHEN THE NEW PHARMACIST PRESCRIBING LAW WENT INTO EFFECT, HAVE YOU SOUGHT A (YOUR) PHARMACIST'S ADVICE____________________?

(circle one)
MORE FREQUENTLY....................1
LESS FREQUENTLY....................2 21
ABOUT THE SAME.....................3

74. DO YOU THINK THAT FROM NOW ON, YOU WILL SEEK A (YOUR) PHARMACIST'S ADVICE____________________?

(circle one)
MORE OFTEN.........................1
LESS OFTEN.........................2 22
ABOUT THE SAME.....................3

75. ABOUT HOW MANY DRUG STORES ARE THERE IN THE AREA WHERE YOU PERSONALLLY TRADE?

none...............................1
only 1 or 2........................2
3 to 5.............................3 23
5 to 10............................4
over 10............................5

NOW I WOULD LIKE TO ASK A FEW BACKGROUND QUESTIONS JUST TO BE SURE WE HAVE EVERYTHING CORRECT...SUCH AS...

76. SEX?
male...............................1 24
female.............................2

77. INTO WHICH AGE GROUP WOULD YOU FALL?

(circle one)
18 to 35...........................1
36 to 55...........................2 25
over 55............................3

78. RACE?

(circle one)
white..............................1
black..............................2
American Indian, Eskimo, or Aleut..3 26
Asian, Asian Indian,
or Pacific Islander................4
Hiapanic...........................5
other(specify)__________________6

79. MARITAL STATUS?

(circle one)
single 1
married............................2
separated..........................3 27
divorced...........................4
widowed............................5

80. INTO WHICH OF THE FOLLOWING BRACKETS DOES YOUR ANNUAL FAMILY INCOME (before taxes) FALL?

(circle one)
LESS THAN $10,000 A YEAR...........1
BETWEEN $10,000 AND $30,000 A YEAR.2
BETWEEN $30,000 AND $50,000 A YEAR.3 28
BETWEEN $50,000 AND $75,000 A YEAR.4
OR OVER $75,000 A YEAR.............5

81. HOW MUCH SCHOOLING HAVE YOU HAD?

(check one)
____no formal schooling
____some elementary school
____elementary school graduate
____some high school
____high school graduate
____some college
____college graduate
____some graduate work
____masters degree
____doctoral degree
____professional medical degree
____law degree
____other (specify)
____

(for coding purposes only)
. Elementary school
(0 to 8 years thru high school,
1 to 3 years)......................1
High school 29
(4 years)..........................2
College
(1 to 3 years).....................3
College
(4 years)..........................4
College
(5 years or more)..................5

82. DO YOU HAVE ANY CHILDREN?

(circle one)
yes............................... 1 30
no.(end of survey).................2

83. WHAT ARE THE AGES OF THE CHILDREN WHO LIVE WITH YOU?

(enter ages)

a.__________ 31,32
b.__________ 33,34
c.__________ 35,36
d.__________ 37,38
e.__________ 39,40
f.__________ 41,42
g.__________ 43,44
h.__________ 45,46

THAT FINISHES OUR QUESTIONAIRE.
DO YOU HAVE ANY QUESTIONS ABOUT THE STUDY?

(The study is to see if we can identify less expensive alternate forms of medical care.)

THANKYOU VERY MUCH FOR HELPING US OUT.
WE TRULY APPRECIATE IT.

For interviewer:
97. Please enter the last three numbers of the county code from the calling sheet_________________________. 6, 7, 8

APPENDIX B
SURVEY QUESTIONNAIRE
(ENGLISH VERSION)

HELLO, I'M ____________________ FROM THE UNIVERSITY OF FLORIDA. WE'RE DOING A STUDY ON WAYS TO CUT HEALTH CARE COSTS AND WE'D LIKE TO GET YOUR OPINION. IT WON'T TAKE MORE THAN 10 MINUTES OF YOUR TIME, BUT WE DO NEED YOUR HELP.
(I must say that this is definitely not a sales call and that everyone we have interviewed so far has found this to be very interesting. For example, the first question is...)
(Verify that the person is over 18.)
THE FIRST QUESTION IS...

1. DO YOU HAVE ONE PHARMACY, IN PARTICULAR, WHERE YOU TRADE MOST OF THE TIME?

(circle one) yes 1
no (go to Q5 and skip 47-50).....2 1

If "yes" use the specific case ("Your pharmacist...") for the attitudinal statements.

If "no" use the general case ("Pharmacists...") for the attitudinal statements.

2. WHAT IS THE NAME OF THE PHARMACY? ______________________________
(I just need to know if it is a chain or an independent store.)

(for coding purposes only) chain................................1
independent..........................2
hmo/ppo..............................3 2
clinic...............................4
franchise............................5
other................................6

3. HOW LONG HAVE YOU BEEN TRADING THERE?

(record # of years)________________________________ 3,
(round up) 4

4. DO YOU KNOW THE NAME OF THE PHARMACIST (OR PHARMACISTS) WHO USUALLY HELPS YOU?
(I just need a yes or no answer.)

(circle one) yes.................................1 5
no..................................2

5. WHO USUALLY PAYS FOR YOUR PRESCRIPTIONS?

(circle one) self (includes check and charge).....(ask Q6)....1
private third party
(includes Blue Cross, HMO's, PPO's, and others)..2 6
(go to Q7)
federal or state aid...(go to Q7)................3
other (specify)__(ask Q6)______________________4

6. ARE YOU REIMBURSED BY AN INSURANCE COMPANY?

(circle one) yes..................................1 7
no...................................2

7. (If third party) IS THERE A CO-PAY OR A DEDUCTABLE?

(circle one) yes..................................1 8
no...................................2

8. DO YOU HAVE A FAMILY DOCTOR THAT YOU CAN GO TO WHEN YOU ARE ILL?

(circle one) yes..................................1
no...(go to Q11).....................2 9

9. HOW LONG HAVE YOU BEEN GOING TO HIM?
(record # of years)______________________________ 10,
(round up) 11

If "yes" use the specific case (YOUR DOCTOR...") for the attitudinal statements

If "no" use the general case (DOCTORS...") for the attitudinal statements.

10. DO YOU KNOW WHAT TYPE OF PRACTICE HE HAS? FOR EXAMPLE,
DOES HE PRACTICE ALONE, IN A GROUP, IN A CLINIC...?

(circle one) private/solo...................1
hmo/ppo........................2
group..........................3
clinic.........................4 12
doc-in-the-box.................5
other(specify) _______________6
don't know.....................7

11. WHO USUALLY PAYS FOR YOUR DOCTOR VISITS?

(circle one) self (includes check and charge).....(ask Q12).......1
private third party
(includes Blue Cross, HMO's, PPO's and others).......2 13
(go to Q 13)
federal or state aid...(go to Q13)..................3
other (specify)_____(ask Q12)________________________4

12. ARE YOU REIMBURSED BY AN INSURANCE COMPANY?

(circle one) yes.......................1 14
no.......................2

13. (If third party) IS THERE A CO-PAY OR A DEDUCTABLE?

(circle one) yes.......................1 15
no.......................2

14. ABOUT HOW MANY TIMES DID YOU VISIT A DOCTOR IN THE LAST YEAR?

(Record # of times) ____________________________ 16, 17

15. WAS THIS MOSTLY FOR YOURSELF OR FOR ANOTHER FAMILY MEMBER (PERSON)?

(circle one) self......................1 18
other(s)..................2
equal.....................3

NOW, I'M GOING TO READ SOME STATEMENTS ABOUT DOCTORS AND PHARMACISTS. PLEASE TELL ME IF YOU AGREE, DISAGREE, OR HAVE NO OPINION REGARGING THEM.

If respondent sees a regular doctor, please add, "WOULD YOU PLEASE THINK OF THE DOCTOR YOU GO TO MOST OFTEN?" and read the statements in the specific case ("MY DOCTOR"). Otherwise, please read the statements in the general case ("MOST DOCTORS").

16. I USUALLY CAN GET AN APPOINTMENT WITH MY DOCTOR WITHIN 2 OR 3 DAYS.
(I UAUALLY CAN GET AN APPOINTMENT WITH A DOCTOR WITHIN 2 OR 3 DAYS.)

agree......................1
no opinion.................2 19
disagree...................3

17. I USUALLY CAN SEE MY DOCTOR WITHOUT AN APPOINTMENT.
(I USUALLY CAN SEE A DOCTOR WITHOUT AN APPOINTMENT.)

agree......................1
no opinion.................2 20
disgree....................3

18. MY DOCTOR IS USUALLY AVAILABLE AFTER OFFICE HOURS (EVENINGS AND WEEKENDS).
(MOST DOCTORS ARE AVAILABLE AFTER OFFICE HOURS, EVENINGS AND WEEKENDS.)

agree......................1
no opinion.................2 21
disagree...................3

19. MY DOCTOR WILL TALK TO ME OVER THE PHONE WHEN I CALL.
(MOST DOCTORS WILL TALK TO ME OVER THE PHONE WHEN I CALL.)

agree......................1
no opinion.................2 22
disagree...................3

20. GETTING TRANSPORTATION TO MY DOCTOR'S OFFICE CAN BE A PROBLEM FOR ME.
(GETTING TRANSPORTATION TO A DOCTOR'S OFFICE CAN BE A PROBLEM FOR ME.)

agree......................1
no opinion.................2 23
disagree...................3

21. MY DOCTOR DOESN'T LIKE TO BE TROUBLED UNLESS IT IS REALLY NECESSARY.
(MOST DOCTORS DO NOT LIKE TO BE TROUBLED UNLESS IT IS REALLY NECESSARY.)

agree......................1
no opinion.................2 24
disagree...................3

22. I HAVE TO WAIT TOO LONG IN THE OFFICE WHEN I GO TO SEE MY DOCTOR.
(I HAVE TO WAIT TOO LONG IN THE OFFICE WHEN I GO TO SEE MOST DOCTORS.)

agree......................1
no opinion.................2 25
disagree...................3

23. I AM SATISFIED WITH THE AMOUNT OF TIME MY DOCTOR SPENDS WITH ME.
(I AM SATISFIED WITH THE AMOUNT OF TIME THAT MOST DOCTORS SPEND WITH ME.)

agree.......................1
no opinion..................2 26
disagree....................3

24. MY DOCTOR SEEMS TO BE RUSHING ME WHEN HE TALKS TO ME.
(MOST DOCTORS SEEM TO BE RUSHING ME WHEN THEY TALK TO ME.)

agree.......................1
no opinion..................2 27
disagree....................3

25. MY DOCTOR SPENDS EXTRA TIME WITH ME WHEN I NEED IT.
(MOST DOCTORS SPEND EXTRA TIME WITH ME WHEN I NEED IT)

agree.......................1
no opinion..................2 28
disagree....................3

26. MY DOCTOR ALWAYS LETS ME FINISH TELLING HIM ABOUT MY CONDITION.
(MOST DOCTORS ALWAYS LET ME FINISH TELLING THEM ABOUT MY CONDITION.)

agree.......................1
no opinion..................2 29
disagree....................3

27. MY DOCTOR USES TERMS THAT I DON'T UNDERSTAND.
(MOST DOCTORS USE TERMS THAT I DON'T UNDERSTAND.)

agree.......................1
no opinion..................2 30
disagree....................3

28. MY DOCTOR ALWAYS EXPLAINS MY CONDITION TO ME.)
(MOST DOCTORS ALWAYS EXPLAIN MY CONDITION TO ME.)

agree.......................1
no opinion..................2 31
disagree....................3

29. MY DOCTOR WILL TELL ME FRANKLY IF HE DOESN'T KNOW WHAT MY TROUBLE IS. (MOST DOCTORS WILL TELL ME FRANKLY IF THEY DON'T KNOW WHAT MY TROUBLE IS.)

agree.......................1
no opinion..................2 32
disagree....................3

30. I AM ALWAYS AFRAID THAT THE MEDICINE MY DOCTOR PRESCRIBES WILL BE TOO EXPENSIVE FOR ME.
(I AM ALWAYS AFFRAID THAT THE MEDICINE MOST DOCTORS PRESCRIBE WILL BE TOO EXPENSIVE FOR ME.)

agree.......................1
no opinion..................2 33
disagree....................3

31. I HAVE TO LOSE PAY WHEN I TAKE TIME OFF FROM WORK TO SEE MY DOCTOR. (I HAVE TO LOSE PAY WHEN I TAKE TIME OFF FROM WORK IN ORDER TO SEE A DOCTOR.)

agree.......................1
no opinion..................2 34
disagree....................3

32. TRANSPORTATION COSTS ME TOO MUCH WHEN I GO TO SEE MY DOCTOR.
(TRANSPORTATION COSTS ME TOO MUCH WHEN I GO TO SEE A DOCTOR.)

agree.......................1
no opinion..................2 35
disagree....................3

33. MY DOCTOR'S OFFICE IS CONVENIENTLY LOCATED.
(A DOCTOR'S OFFICE IS CONVENIENTLY LOCATED.)

agree.......................1
no opinion..................2 36
disagree....................3

34. I HAVE TO TRAVEL MORE THAN 30 MINUTES EACH WAY IN ORDER TO SEE MY DOCTOR.
(I HAVE TO TRAVEL MORE THAN 30 MINUTES EACH WAY IN ORDER TO SEE A DOCTOR.)

agree.......................1
no opinion..................2 37
disagree....................3

35. I DON'T MIND WAITING AS LONG AS 30 MINUTES WHEN I GO TO SEE MY DOCTOR.
(I DON'T MIND WAITING AS LONG AS 30 MINUTES WHEN I GO TO SEE A DOCTOR.)

agree......................1
no opinion.................2 38
disagree...................3

(Skip questions 36, 37, & 38 for people who use HMO's, PPO's, Medicaid or Medicare.)

36. I HAVE TO PAY MY DOCTOR A SEPARATE FEE FOR EACH TIME I CONTACT HIM, EVEN IF IT IS ONLY FOR A PHONE CALL.
(I HAVE TO PAY MOST DOCTORS A SEPARATE FEE FOR EACH TIME I CONTACT THEM, EVEN IF IT IS ONLY FOR A PHONE CALL.)

agree......................1
no opinion.................2 39
disagree...................3

37. MY DOCTOR VISITS ARE TOO EXPENSIVE FOR ME.
(DOCTOR VISITS ARE TOO EXPENSIVE FOR ME.)

agree......................1
no opinion.................2 40
disagree...................3

38. MY DOCTOR'S FEES ARE REASONABLE.
(MOST DOCTORS' FEES ARE REASONABLE.)

agree......................1
no opinion.................2 41
disagree...................3

39. I FEEL COMFORTABLE IN ASKING MY PHARMACIST FOR ADVICE OR INFORMATION.
(I FEEL COMFORTABLE IN ASKING A PHARMACIST FOR ADVICE OR INFORMATION.)

agree......................1
no opinion.................2 42
disagree...................3

40. MY PHARMACIST DOESN'T TALK DIRECTLY TO ME WHEN I'M IN THE PHARMACY, BUT USUALLY RELATES ANY INFORMATION THROUGH THE DRUG CLERK.
(MOST PHARMACISTS DON'T TALK TO ME DIRECTLY WHEN I'M IN THE PHARMACY, BUT USUALLY RELATE ANY INFORMATION THROUGH THE DRUG CLERK.

agree......................1
no opinion.................2 43
disagree...................3

41. MY PHARMACIST WILL TALK TO ME OVER THE PHONE WHEN I CALL.
(MOST PHARMACISTS WILL TALK TO ME OVER THE PHONE WHEN I CALL.)

agree......................1
no opinion.................2 44
disagree...................3

42. MY PHARMACIST SEEMS TO BE PERSONALLY CONCERNED FOR MY HEALTH.
(MOST PHARMACISTS SEEM TO BE PERSONALLY CONCERNED FOR MY HEALTH.)

agree......................1
no opinion.................2 45
disagree...................3

43. MY PHARMACIST TRIES TO SAVE ME MONEY ON PRESCRIPTIONS.
(MOST PHARMACISTS TRY TO SAVE ME MONEY ON PRESCRIPTIONS.)

agree......................1
no opinion.................2 46
disagree...................3

44. I TRUST MY PHARMACIST'S RECOMMENDATIONS AND ADVICE.
(I TRUST MOST PHARMACIST'S RECOMMENDATIONS AND ADVICE.)

agree......................1
no opinion.................2 47
disagree...................3

45. I LIKE TO GET ANOTHER PROFESSIONAL OPINION IN ADDITION TO WHAT MY PHARMACIST TELLS ME.
(I LIKE TO GET ANOTHER PROFESSIONAL OPINION IN ADDITION TO WHAT A PHARMACIST TELLS ME.)

agree......................1
no opinion.................2 48
disagree...................3

(Questions 47 through 50 are only for those respondents indicating a regular pharmacy.)
(NOW, PLEASE THINK OF THE PHARMACIST WHO USUALLY HELPS YOU.)

46. MY PHARMACIST KNOWS ME BY NAME.

agree......................1
no opinion.................2 49
disagree...................3

47. MY PHARMACIST USUALLY CALLS ME BY NAME WHEN HE SEES ME.

agree......................1
no opinion.................2 50
disagree...................3

48. MY PHARMACIST USUALLY WILL STOP WHAT HE IS DOING IN ORDER TO TALK TO ME.

agree......................1
no opinion.................2 51
disagree...................3

49. I CAN CONFIDE IN MY PHARMACIST.

agree......................1
no opinion.................2 52
disagree...................3

50. DO YOU THINK THAT PHARMACISTS ARE QUALIFIED TO PRESCRIBE DRUGS?

yes........................1
no.........................2 53
no opinion.................3

51. DID YOU KNOW THAT A NEW FLORIDA LAW ALLOWS PHARMACISTS TO PRESCRIBE CERTAIN PRESCRIPTION DRUGS?

(circle one) yes................................1
no...(go to Q67)...................2 54

52. HOW DID YOU FIRST LEARN ABOUT THIS NEW LAW?
(Probe if necessary.)

(circle one)
national newspaper report..........01
local newspaper report.............02
newspaper advertisement............03
national radio report..............04
local radio report.................05
radio advertisement................06
national television report.........07
local television report............08
television advertisement...........09 55,
physician..........................10 56
pharmacist.........................11
other health professional..........12
friend/relative....................13
not sure/don't remember............14

53. HAS A (YOUR) PHARMACIST TALKED TO YOU OR GIVEN YOU WRITTEN INFORMATION ABOUT THIS NEW LAW?

(circle one) a. talked to you
yes......1 57
no.......2

(circle one) b. given you written information
yes......1 58
no.......2

54. HAS A (YOUR) DOCTOR TALKED TO YOU OR GIVEN YOU WRITTEN INFORMATION ABOUT THIS NEW LAW?

(circle one) a. talked to you
yes......1 59
no.......2

(circle one) b. given you written information
yes......1 60
no.......2

55. DO YOU CONSIDER YOURSELF TO BE WELL INFORMED ABOUT WHAT PHARMACISTS CAN DO UNDER THIS NEW LAW?

(circle one)
yes.........................1
no(go to Q67)...............2 61

56. WOULD YOU SAY THAT PHARMACISTS ARE ALLOWED TO PRESCRIBE FOR A LARGE VARIETY OR A SMALL VARIETY OF HEALTH AILMENTS OR CONDITIONS?

(circle one) large........................1
small........................2 62
don't know..................3

57. DO YOU THINK PHARMACISTS ARE ALLOWED TO PRESCRIBE DRUGS FOR LONG TERM OR SHORT TERM TREATMENT, OR BOTH?

(circle one) long-term..................1
short-term.................2 63
both........................3
don't know..................4

58. DO YOU THINK THAT PHARMACISTS ARE ALLOWED TO PRESCRIBE ...

a. DRUGS FOR INJECTION?

(circle one) yes...................1
no.....................2 64
don't know...........3

b. ...COLDS AND ALLERGIES?

(circle one) yes...................1
no.....................2 65
don't know...........3

c. ...PIN WORMS?

(circle one) yes...................1
no.....................2 66
don't know...........3

d. ...HIGH BLOOD PRESSURE?

(circle one) yes...................1
no.....................2 67
don't know...........3

e. ...GENERAL ACHES AND PAINS? (INCLUDING MENSTURAL PAIN)

(circle one)
yes....................1
no.....................2 68
don't know...........3

f. ...DIABETES?

(circle one)
yes....................1
no.....................2 69
don't know...........3

g. ...HEAD LICE?

(circle one)
yes....................1
no.....................2 70
don't know...........3

h. ...CORNS AND WARTS?

(circle one)
yes....................1
no.....................2 71
don't know...........3

i. ...INTERNAL INFECTIONS?

(circle one)
yes....................1
no.....................2 72
don't know...........3

j. ...SKIN RASHES?

(circle one)
yes....................1
no.....................2 73
don't know...........3

59. HAVE YOU ASKED A (YOUR) PHARMACIST TO PRESCRIBE A DRUG FOR YOU UNDER THIS NEW LAW?

(circle one)
yes 1 74
no...(go to Q67)......2

60. HOW MANY TIMES HAVE YOU DONE THIS?
(enter # of times) ____ 75

61. DID HE ____?

(enter # of times)
a. PRESCRIBE A DRUG FOR YOU? ________ 76
b. RECOMMEND A NON-PRESCRIPTION DRUG ________ 77
c. RECOMMEND THAT YOU SEE A DOCTOR? ________ 78

62. WHEN YOU ASKED A (YOUR) PHARMACIST TO PRESCRIBE A DRUG FOR YOU, WERE YOU...

(circle one)
VERY SATISFIED WITH THE RESULTS..............1
SOMEWHAT SATISFIED...........................2
NEUTRAL (neither satisfied nor dissatisfied).3 79
SOMEWHAT DISSATISFIED........................4
VERY DISSATISFIED............................5

63. DID YOUR PHARMACIST CHARGE YOU A FEE FOR HIS SERVICES IN ADDITION TO THE COST OF THE DRUG

(circle one)
yes..1
no ...(go to Q67)............................2 1

64. DO YOU REMEMBER HOW MUCH IT WAS?

(circle one)
yes..1
no....(go to Q67)............................2 2

65. HOW MUCH WAS IT?

(Enter dollar amount) $____.____ 3, 4, 5, 6

66 DO YOU THINK THE FEE WAS TOO LOW, TOO HIGH, OR ABOUT RIGHT?

(circle one)
too low......................................1
too high.....................................2 7
about right..................................3

67. HERE ARE SOME OF THE CONDITIONS FOR WHICH PHARMACISTS ARE ALLOWED TO PRESCRIBE. NORMALLY, WHO WOULD BE THE FIRST PERSON YOU WOULD CONSULT, A DOCTOR OR A PHARMACIST, IF YOU HAD ONE OF THESE CONDITIONS?

a. GENERAL ACHES AND PAINS (INCLUDING MENSTURAL PAIN) (circle one)
pharmacist............1
doctor................2 8
other response........3

b. EAR ACHE (circle one)
pharmacist............1
doctor................2 9
other response........3

c. HEMORROIDS (circle one)
pharmacist............1
doctor................2 10
other response........3

d. LEG CRAMPS (circle one)
pharmacist............1
doctor................2 11
other response........3

e. FLUORIDE VITAMINS (for dental cavity prevention) (circle one)
pharmacist............1
doctor................2 12
other response........3

f. NAUSEA AND VOMITING (circle one)
pharmacist............1
doctor................2 13
other response........3

g. BURNING URINATION (circle one)
pharmacist............1
doctor................2 14
other response........3

h. ALLERGIES (SUCH AS STUFFY NOSE, HIVES, SNEEZING, HAYFEVER, ETC.) (circle one)
pharmacist............1
doctor................2 15
other response........3

i. PINWORMS (circle one)
pharmacist............1
doctor................2 16
other response........3

j.SKIN INFECTIONS AND RASHES (circle one) pharmacist............1
doctor................2 17
other response........3

k.CORNS AND WARTS (circle one) pharmacist............1
doctor................2 18
other response........3

l.HEAD LICE (circle one) pharmacist............1
doctor................2 19
other response........3

68. CONSIDERING THE LIST WE JUST WENT OVER, WOULD YOU SAY THAT THE LAW IS OK AS IT STANDS, OR WOULD YOU GIVE THE PHARMACIST GREATER OR LESS AUTHORITY TO PRESCRIBE?

(circle one) greater................................1
less...................................2 20
law ok as it stands...................3
no opinion/not sure...................4

69. DO YOU FEEL IT'S A GOOD IDEA, IN GENERAL, TO HAVE A LAW THAT ALLOWS PHARMACISTS TO PRESCRIBE PRESCRIPTION DRUGS?

(circle one) yes....................................1
no.....................................2 21
don't know/not sure...................3

70. DO YOU FEEL THAT IT WOULD BE A GOOD IDEA TO ALLOW OTHER TYPES OF HEALTH PRACTIONERS WHO ARE NOT PHYSICIANS TO PRESCRIBE DRUGS? SUCH AS...

a. PHYSICIANS' ASSISTANTS? yes..........................1
no...........................2 22
don't know/not sure..........3

b. NURSE PRACTIONERS? yes..........................1
no...........................2 23
don't know/not sure..........3

c. CHIROPRACTORS? yes..........................1
no...........................2 24
don't know/not sure..........3

d. OPTOMETRISTS? yes..........................1
no...........................2 25
don't know/not sure..........3

71. WOULD YOU LET YOUR PHARMACIST PRESCRIBE FOR YOU IN THE FUTURE?

(circle one) yes....................................1
no....................................2 26
uncertain.............................3

72. IF THE PHARMACIST EVALUATED YOUR CONDITION AND PRESCRIBED A DRUG FOR YOU, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one) yes....................................1 27
no....(go to Q74)......................2
uncertain...(go to Q74)................3

73. HOW MUCH WOULD YOU CONSIDER TO BE REASONABLE?
(Prompt to answer between $1.00 and $25.00 if necessary)

$_____._____ 28,
29,
30,
31

74. WHAT IF HE INSTEAD RECOMMENDED AN OVER-THE-COUNTER DRUG, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one) yes....................................1 32
no....(go to Q76)......................2
uncertain...(go to Q76)................3

75. HOU MUCH WOULD YOU CONSIDER TO BE REASONABLE? (between $1 and $25)

$_____._____ 33,
34,
35,
36

76. WHAT IF HE INSTEAD RECOMMENDED THAT YOU SEE A DOCTOR, WOULD YOU BE WILLING TO PAY A CONSULTATION FEE?

(circle one) yes....................................1
no....(go to Q78)......................2 37
uncertain...(go to Q 78)...............3

77. HOW MUCH WOULD YOU CONSIDER TO BE REASONABLE? (between $1 and $10)

$_____._____ 38,
39,
40,
41

78. IF YOUR INSURANCE COMPANY PAID THE PHARMACIST'S FEE, WOULD YOU BE MORE LIKELY TO TAKE ADVANTAGE OF HIS PRESCRIBING SERVICES?

(circle one)
yes..................................1
no...................................2 42
uncertain............................3

79. HOW WOULD YOU RATE YOUR OVERALL HEALTH FOR A PERSON OF YOUR AGE? WOULD YOU SAY THAT IT IS...

(circle one)
EXCELLENT............................1
GOOD.................................2 43
FAIR.................................3
OR POOR?.............................4

80. DURING THE PAST YEAR, ABOUT HOW MANY TIMES DID YOU ASK A (YOUR) PHARMACIST FOR ADVICE CONCERNING OVER-THE-COUNTER DRUGS OR HEALTH INFORMATION?

(enter # of times) ____________ 44, 45

81. SINCE LAST MAY, WHEN THE NEW PHARMACIST PRESCRIBING LAW WENT INTO EFFECT, HAVE YOU SOUGHT A (YOUR) PHARMACIST'S ADVICE ____________________?

(circle one)
MORE FREQUENTLY......................1
LESS FREQUENTLY......................2 46
ABOUT THE SAME.......................3

82. DO YOU THINK THAT FROM NOW ON, YOU WILL SEEK A (YOUR) PHARMACIST'S ADVICE ____________________?

(circle one)
MORE OFTEN...........................1
LESS OFTEN...........................2 47
ABOUT THE SAME.......................3

83. ABOUT HOW MANY DRUG STORES ARE THERE IN THE AREA WHERE YOU PERSONALLLY TRADE?

(record the # of stores) ____________________ 48, 49

84. HOW MANY TOTAL YEARS OF COLLEGE DO YOU THINK IT TAKES TO BECOME A PHARMACIST?

(record the # of years) ____________________ 50, 51

85. HOW MANY TOTAL YEARS OF COLLEGE DO YOU THINK IT TAKES TO BECOME A DOCTOR?

(record the # of years)________________________ 52, 53

NOW CAN I GET SOME BACKGROUND INFORMATION FROM YOU TO FINISH THIS OFF? SUCH AS...

86. SEX?

male..............................1 54
female............................2

87. CAN I GET YOUR AGE?

(record the age) ______________________________ 55, 56

88. RACE?

(circle one)

white.............................1
black.............................2
American Indian, Eskimo, or Aleut..3 57
Asian, Asian Indian,
or Pacific Islander...............4
Hiapanic..........................5
other(specify)__________________6

89. MARITAL STATUS?

(circle one)

single ....(go to Q91)............1
married...........................2
separated..(go to Q91)............3 58
divorced...(go to Q91)............4
widowed....(go to Q91)............5

90. DO BOTH OF YOU HAVE REGULAR JOBS?

(circle one)

yes...............................1 59
no................................2

91. IS YOUR ANNUAL FAMILY INCOME ABOVE OR BELOW 10K A YEAR (before taxes)?

(circle one)	less than $10,000 a year..........1	
	between $10,000 and $30,000 a year.2	
IS IT ABOVE 30K?	between $30,000 and $50,000 a year.3	60
IS IT ABOVE 50K?	between $50,000 and $75,000 a year.4	
IS IT ABOVE 75k	over $75,000 a year...............5	

92. HOW MUCH SCHOOLING HAVE YOU HAD?

(check one)

a. 01____no formal schooling
02____some elementary school
03____elementary school graduate
04____some high school
05____high school graduate
06____some college 61,
07____college graduate 62
08____some graduate work
09____masters degree
10____doctoral degree
11____professional medical degree
12____law degree
13____other (specify)

(for coding purposes only)

b. Elementary school
(0 to 8 years thru high school,
1 to 3 years)....................1
High school 63
(4 years).........................2
College
(1 to 3 years)....................3
College
(4 years).........................4
College
(5 years or more).................5

93. DO YOU HAVE ANY DEPENDENT CHILDREN AT HOME?

(circle one)	yes.............................. 1	64
	no...............................2	

94. WHAT ARE THEIR AGES?

(enter ages)	a.__________	65,66
	b.__________	67,68
	c.__________	69,70
	d.__________	71,72
	e.__________	73,74
	f.__________	75,76
	g.__________	77,78
	h.__________	1,2

95. WHAT IS THE TOTAL NUMBER OF DEPENDENTS IN YOUR HOUSEHOLD?

(record the #) __________ 3,4

96. ARE YOU OR IS ANYONE IN YOUR CLOSE FAMILY OR CIRCLE OF FRIENDS A HEALTH CARE PROFESSIONAL?

(circle one) yes...........1 5
no............2

THAT FINISHES OUR QUESTIONAIRE.
DO YOU HAVE ANY QUESTIONS ABOUT THE STUDY?

(The study is to see if we can identify less expensive alternate forms of medical care.)

THANKYOU VERY MUCH FOR HELPING US OUT.
WE TRULY APPRECIATE IT.

For interviewer:
97. Please enter the last three numbers of the county code from the calling sheet____________________. 6, 7, 8

APPENDIX C
SURVEY QUESTIONNAIRE
(SPANISH VERSION)

HOLA, YO ME LLAMO ______________ Y SOY DE LA UNIVERSIADAD DE LA FLORIDA. ESTAMOS HACIENDO UN ESTUDIO SOBRE EL COSTO DE MEDICAMENTOS Y QUEREMOS SABER SU OPINION ACERCA DE CIERTAS COSAS. NO ES PARA VENDER LE ALGO Y SOLAMENTE TOMA 5 MINUTOS. NOSOTROS AGRADESEMOS SU AYUDA.

1. USTED TIENE UNA FARMACIA EN LA QUE COMPRAS MAS A MENUDO?

(escoga uno) si................................1
no (vaya ala pregunta 5,.........2 1

Si escogio "si" use el caso especifico ("EL FARMACEUTICO SUYO...) para las preguntas de postura.

Si escogio "no" use el caso general ("LOS FARMACEUTICOS") para las preguntas de postura.

2. CUAL ES EL NOMBRE DE LA FARMACIA? ______________________________
(YO SOLAMENTE NECESITO SABER SI ES PARTE DE UNA CADENA O UNA FARMACIA INDEPENDIENTE.)
(solamente para el codigo) cadena..............................1
independiente.......................2
hmo/ppo..............................3 2
clinica..............................4
franquicia..........................5
otra.................................6

3. DESDE CUANDO USTED COMPRA ALLI?

(# de anos)____ 3, 4

4. USTED SABE EL NOMBRE DEL FARMACEUTICO (O FARMACEUTICOS) QUE LE AYUDA MAS A MENUDO?
(YO SOLAMENTE NECESITO UNA REPESTA DE SI O NO.)

(escoga uno) si.................................1 5
no.................................2

5. QUIEN PAGA POR LA RECETA MAS A MENUDO?

(circle one) usted (cheque o tarjeta de credito).............1
(pregunte la #6)
plan medico
(incluye Blue Cross, HMO's, PPO's, y otros)......2 6
(vaya a la pregunta #7)
ayuda federal o del estado (vaya al #7)..........3
otro (pregunte #6)____________________________4

6. LA COMPANIA DE SEGURO LE PAGA A USTED POR LAS MEDICINAS?

(escoga uno) si..................................1 7
no..................................2

7. (Si plan medico) TIENE UN DEDUCIBLE?

(escoga uno) si..................................1 8
no..................................2

8. USTED TIENE UN DOCTOR PARA LA FAMILIA QUE PUEDE VISITAR CUANDO ESTA EMFERMO?

(escoga uno) si..................................1
no...(vaya a la pregunta #11)........2 9

9. DESDE CUANDO TIENE ESTE DOCTOR?
(# de anos)______________________________________ 10, 11

Si escogio "si" use el caso especifico ("EL DOCTOR SUYO...") para las preguntas de postura.

Si escogio "no" use el caso general ("LOS DOCTORES...") para las preguntas de postura.

10. QUE TIPO DE CONSULTA TIENE? POR EJEMPLO, TIENE LA CONSULTA SOLO, CON UN GRUPO DE DOCTORES, O EN UN CLINICA?

(escoga uno)
privada/solo...................1
hmo/ppo........................2
grupo..........................3
clinica........................4 12
doc-in-the-box.................5
otra__________________________6
no sabe........................7

11. QUIEN PAGA LAS VISITAS AL DOCTOR?

(escoga uno)
usted (checque o tarjeta de credito.(pregunte la #12)1
plan medico
(incluye Blue Cross, HMO's, PPO's y otros)...........2 13
(vaya al #13)
ayuda federal o del estado (vaya al #13).............3
otra________________(pregunte la # 12)_______________4

12. LA COMPANIA DE SEGURO LE PAGA A USTED POR LAS VISITAS AL DOCTOR?

(escoga uno)
si.........................1 14
no.........................2

13. (Si plan medico) TIENE UN DEDUCIBLE?

(escoga uno)
yes........................1 15
no.........................2

14. CUANTAS VISITAS AL DOCTOR HA HECHO USTED EL ANO PASADO?

(# de veces) ___________________________ 16, 17

15. Por favor ponga si la persona fue al doctor con otra persona de la familia.

(escoga uno)
usted......................1 18
otra.......................2
iqual......................3

AHORA, YO VOY A LEER UNAS FRACES SOBRE DOCTORES Y FARMACEUTICOS. POR FAVOR, DIGAME SI, NO, O NINGUNA OPINION SOBRE LAS FRACES.

Si la persona ve a un doctor regularmente: diga "POR FAVOR PIENSA EN EL DOCTOR GUE USTED VISITA MAS A MENUDO," u lea las fraces en el caso especifico ("MI DOCTOR"). Si no, lea las fraces eb el caso general ("CASI TODOS LOS DOCTORES").

16. YO PUEDO CONSEGUIR UNA CITA CON MI DOCTOR PARA 2 O 3 DIAS DESPUES.
(YO PUEDO CONSEQUIR UNA CITA CON UN DOCTOR PARA 2 O 3 DIAS DESPUES.)

si..........................1
no sabe.....................2 19
no..........................3

17. YO PUEDO VER MI DOCTOR SIN UNA CITA.
(YO PUEDO VER UN DOCTOR SIN UNA CITA.)

si..........................1
no sabe.....................2 20
no..........................3

18. MI DOCTOR CASI SIEMPRE SE ENCUENTRA DESPUES QUE CIERRAN LA CONSULTA, DE NOCHE Y LOS FINES DE SEMANA.
(CASI TODO DOCTORES SE ENCUENTRAN DESPUES QUE CIERRAN LA CONSULTA, DE NOCHE Y LOS FINES DE SEMANA.)

si..........................1
no sabe.....................2 21
no..........................3

19. MI DOCTOR HABLA CONMIGO CUANDO LLAMO POR TELEFONO.
(CASI TODOS LOS DOCTORES HABLAN CONMIGO CUANDO LLAMO POR TELEFONO.)

si..........................1
no sabe.....................2 22
no..........................3

20. CONSIGUIENDO TRANSPORTACION A LA CONSULTA DEL DOCTOR PUEDE SER UN PROBLEMA PARA MI.
(CONSIGUIENDO TRANSPORTACION A LA CONSULTA DE UN DOCTOR PUEDA SER UN PROBLEMA PARA MI.)

si..........................1
no sabe.....................2 23
no..........................3

21. A MI DOCTOR LE DISGUSTA QUE LO MOLESTE CUANDO NO HAY VERDADERA NECESIDAD.
(CASI TODOS LOS DOCTORES LES MOLESTAN QUE LO DISTURBE CUANDO NO HAY VERDADERA NECESIDAD.)

si..........................1
no sabe.....................2 24
no..........................3

22. TO TENGO QUE ESPERAR MUCHO TIEMPO EN LA CONSULTA CUANDO VOY AL DOCTOR.
(YO TENGO QUE ESPERAR MUCHO TIEMPO EN LAS CONSULTAS CUENDO VOY AL DOCTOR.)

si..........................1
no sabe.....................2 25
no..........................3

23. YO ESTOY SATISFECHO CON LA CANTIDAD DE TIEMPO QUE EL DOCTOR TOMA CONMIGO.
(YO ESTOY SATISFECHO CON LA CANTIDAD DE TIEMPO QUE LOS DOCTORES TOMAN CONMIGO.)

si..........................1
no sabe.....................2 26
no..........................3

24. ME PARECE QUE MI DOCTOR ESTA APURADO CUANDO HABLA CONMIGO.
(ME PARECE QUE LOS DOCTORES ESTAN APURADO CUANDO HABLAN CONMIGO.)

si..........................1
no sabe.....................2 27
no..........................3

25. MI DOCTOR TOMA MAS TIEMPO CONMIGO CUANDO ES NECESARIO.
(CASI TODO LOS DOCTORES TOMAN MAS TIEMPO CONMIGO CUANDO ES NECESARIO.)

si..........................1
no sabe.....................2 28
no..........................3

26. MI DOCTOR SIEMPRE ME DEJA TERMINAR DE EXPLICAR MI CONDICION.
(CASI TODO LOS DOCTORES SIEMPRE ME DEJAN TERMINAR DE EXPLICAR MI CONDICION.)

si..........................1
no sabe.....................2 29
no..........................3

27. MI DOCTOR USA PALABRAS QUE YO NO ENTIENDO.
(CASI TODO LOS DOCTORES USAN PALABRAS QUE YO NO ENTIENDO.)

si..........................1
no sabe.....................2 30
no..........................3

28. MI DOCTOR SIEMPRE ME EXPLICA MI CONDICION.
(CASI TODO LOS DOCTORES SIEMPRE ME EXPLICAN MI CONDICION.)

si..........................1
no sabe.....................2 31
no..........................3

29. MI DOCTOR ME PUEDE DECIR FRANCAMENTE CUANDO NO SABE LO QUE TENGO.
(CASI TODO LOS DOCTORES ME PUEDEN DECIR FRANCAMENTE CUANDO NO SABEN LO QUE TENGO.)

si..........................1
no sabe.....................2 32
no..........................3

30. YO SIEMPRE TENGO MIEDO QUE LA MEDICINA QUE MI DOCTOR ME RECETA VA A SER MUY CARA.
(YO SIEMPRE TENGO MIEDO QUE LA MEDICINA QUE LOS DOCTORES RECETAN VA A SER MUY CARA.)

si..........................1
no sabe.....................2 33
no..........................3

31. YO PIERDO MI SUELDO CUANDO FALTO AL TRABAJO PARA PODER IR AL DOCTOR.
(YO PIERDO MI SUELDO CUANDO FALTO AL TRABAJO PARA PODER IR AL DOCTOR.)

si..........................1
no sabe.....................2 34
no..........................3

32. TRANSPORTACION ME CUESTA MUCHO CUANDO VOY AL DOCTOR.
(TRANSPORTACION ME CUESTA MUCHO CUANDO VOY AL DOCTOR.)

si..........................1
no sabe.....................2 35
no..........................3

33. LA CONSULTA DE MI DOCTOR ESTA LOCALIZADA CERCA DE MI CASA.
(LA CONSULTA DE UN DOCTOR ESTA LOCALIZADA CERCA DE MI CASA.)

si..........................1
no sabe.....................2 36
no..........................3

34. YO TENGO QUE VIAJAR MAS DE 30 MINUTOS DE MI CASA A LA CONSULTA DE MI DOCTOR.
(YO TENGO QUE VIAJAR MAS DE 30 MINUTOS DE MI CASA A LA CONSULTA DEL DOCTOR.)

si..........................1
no sabe.....................2 37
no..........................3

35. NO ME DISGUSTA TENER QUE ESPERAR HASTA 30 MINUTOS CUANDO VOY AL DOCTOR.
(NO ME DISGUSTA TENER QUE ESPERAR HASTA 30 MINUTOS CUANDO VOY AL DOCTOR.)

si..........................1
no sabe.....................2 38
no..........................3

(Omita las preguntas 36,37,y 38 para las personas que usan HMO, PPO, o Medicaid)

36. YO TENGO QUE PAGAR LE A MI DOCTOR CADA VEZ QUE HABLO CON EL, AUNQUE SEA POR TELEFONO.
(YO TENGO QUE PAGAR LE A MI DOCTOR CADA VEZ QUE HABLO CON EL, AUNQUE SEA POR TELEFONO.)

si..........................1
no sabe.....................2 39
no..........................3

37. LAS VISITAS A MI DOCTOR SON MUY COSTOSAS PARA MI.
(VISITAS AL DOCTOR SON MUY COSTOSAS PARA MI.)

si..........................1
no sabe.....................2 40
no..........................3

38. MI DOCTOR COBRA RASONABLEMENTE.
(CASI TODOS LOS DOCTORES COBRAN RASONABLEMENTE.

si..........................1
no sabe.....................2 41
no..........................3

39. YO ME SIENTO MUY COMODO CON EL FARMACEUTICO CUANDO LE PIDO CONSEJO O INFORMACION.
(YO ME SIENTO MUY COMODO CON LOS FARMACEUTICOS CUANDO LES PIDO CONSEJO O INFORMACION.)

si..........................1
no sabe.....................2 42
no..........................3

40. MI FARMACEUTICO NO ME HABLA DIRECTAMENTE, PERO CUALQUIER INFORMACION VIENE POR SU ASISTENTE.
(CASI TODO LOS FARMACEUTICOS NO ME HABLAN DIRECTAMENTE, PERO CUALQUIER INFORMACION VIENE POR SU ASISTENTE.)

si..........................1
no sabe.....................2 43
no..........................3

41. MI FARMACEUTICO ME HABLA POR EL TELEFONO CUANDO LLAMO.
(CASI TODO LOS FARMACEUTICOS ME HABLAN POR EL TELEFONO CUANDO LLAMO.)

si..........................1
no sabe.....................2 44
no..........................3

42. A MI ME PARECE, QUE EL FARMACEUTICO SE PREOCUPA POR MI SALUD.
(A MI ME PARECE QUE TODOS LOS FARMACEUTICOS SE PREOCUPAN POR MI SALUD.)

si..........................1
no sabe.....................2 45
no..........................3

43. MI FARMACEUTICO TRATA DE AHORRARME DINERO EN LAS RECETAS.
(CASI TODO LOS FARMACEUTICOS TRATAN DE AHORRARME DINERO EN LAS RECETAS.)

si..........................1
no sabe.....................2 46
no..........................3

44. YO CONFIO EN LAS RECOMENDACIONES Y CONSEJOS DE MI FARMACEUTICO.
(YO CONFIO EN LA RECOMENDACIONES Y CONSEJOS DE LOS FARMACEUTICOS.)

si..........................1
no sabe.....................2 47
no..........................3

45. ME GUSTA CONSEGUIR OTRA OPINION PROFESIONAL ADEMAS DE LA OPINION DE MI FARMACEUTICO.
(ME GUSTA CONSEGUIR OTRA OPINION PROFESIONAL ADEMAS DE LA OPINION DE UN FARMACEUTICO.)

si..........................1
no sabe.....................2 48
no..........................3

(Preguntas 47 a 50 son solamente para las personas que tienen una farmacia regular.)
(AHORA, POR FAVOR, PIENSA DEL FARMACEUTICO QUE CASI SIEMPRE LO AYUDA.)

46. MI FARMACEUTICO ME CONOCE POR MI NOMBRE.

si..........................1
no sabe.....................2 49
no..........................3

47. MI FARMACEUTICO ME LLAMA POR MI NOMBRE CUANDO ME VE.

si..........................1
no sabe.....................2 50
no..........................3

48. MI FARMACEUTICO PARA LO QUE ESTA HACIENDO PARA HABLAR CONMIGO.

si..........................1
no sabe.....................2 51
no..........................3

49. YO PUEDO CONFIAR EN MI FARMACEUTICO.

si..........................1
no sabe.....................2 52
no..........................3

50. USTED PIENSA QUE LOS FARMACEUTICOS SON CALIFICADOS PARA RECETAR MEDICINAS?

si..........................1
no 2 53
no esta seguro..............3

51. USTED SABE QUE UNA LEY NUEVA EN LA FLORIDA QUE LOS FARMACEUTICOS RECETEN ALGUNA MEDICINAS?

(escoga uno)
si..................................1
no...(vaya a la pregunta #67).......2 54

52. COMO SE ENTERO USTED DE ESTA LEY NUEVA?
(Investige se es necessario)

(escoga uno)
reporte de periodico nacional......01
reporte de periodico local.........02
anuncio de periodico...............03
reporte de radio nacional..........04
reporte de radio local.............05
anuncio de radio...................06
reporte de television nacional.....07
reporte de television local........08
anuncio en television..............09 55,
medici.............................10 56
farmaceutico.......................11
otro profesionalfessional..........12
amigo/familia......................13
no esta seguro/no se acuerda.......14

53. SU FARMACEUTICO LE HA DICHO O DADO INMFORMACION SOBRE ESTA LEY NUEVA?

(escoga uno) a. hablado con usted
si.......1 57
no.......2

(escoga uno) b. dado informacion escritsation
si.......1 58
no.......2

54. SU DOCTOR LE HA DICHO O DADO INFORMACION SOBRE ESTA LEY NUEVA?

(escoga uno) a. hablado con usted
si.......1 59
no.......2

(escoga uno) b. dado informacion escrita
si.......1 60
no.......2

55. USTED SE CONSIDERA BIEN INFORMADO ACERCA DE ESTA LEY NUEVA?

(escoga uno) si..........................1
no(vaya a la pregunta 59)...2 61

56. USTED DIRIA QUE FARMACEUTICOS PUEDEN RECETAR PARA MUCHAS O POCAS EMFERMEDADES DIFERENTES?

(escoga uno) grande......................1
chiquita....................2 62
no sabe.....................3

57. USTED PIENSA QUE FARMACEUTICOS PUEDEN RECETAR MEDICINAS PARA TRATAMIENTO LARGO O CORTO O LOS DOS?

(escoga uno) largo tiempo................1
corto tiemo.................2 63
los dos.....................3
no sabe.....................4

58. USTED PIENSA QUE FARMACEUTICOS PUEDEN RECETAR...

a. MEDICINAS PARA INJECION?

(escoga uno) si....................1
no....................2 64
no sabe...............3

b. ...CATARROS Y ALERGIAS?

(escoga uno) si....................1
no....................2 65
no sabe...............3

c. ...OXIUROS?

(escoga uno) si....................1
no....................2 66
no sabe...............3

d. ...PRESION ALTA?

(escoga uno)	si....................1	
	no....................2	67
	no se.................3	

e. ...DOLORES EN GENERAL?

(escoga uno)	si....................1	
	no....................2	68
	no se.................3	

f. ...DIABETES?

(escoga uno)	si....................1	
	no....................2	69
	no se...ow............3	

g. ...PULGAS?

(escoga uno)	si....................1	
	no....................2	70
	no se.................3	

h. ...CALLOS Y VERRUGAS?

(escoga uno)	si....................1	
	no....................2	71
	no se.................3	

i. ...INFECCIONES INTERNAS?

(escoga uno)	si....................1	
	no....................2	72
	no se.................3	

j. ...SALPULLIDO?

(escoga uno)	si....................1	
	no....................2	73
	no se.................3	

59. USTED LE HA PREGUNTADO A SU FARMACEUTICO QUE LE RECETE MEDICINA CON LA LEY NUEVA?

(escoga uno) si....................1 74
no...(vaya a la 67)...2

60. CUANTAS VECES HA HECHO ESO?

(# de veces) _____ 75

61. SI LO HIZO____?

(# de veces)
a. RECETO UNA MEDICINA PARA USTED __________ 76
b. RECOMENDO UNA MEDICINA SIN RECETA __________ 77
c. RECOMENDO QUE USTED VEA A UN DOCTOR __________ 78

62. CUANDO LE PREGUNTO AL FARMACEUTICO QUE LE RECETARA UNA MEDICINA, USTED ESTABA...

(escoge uno)
MUY SATISFECHO CON EL RESULTADO?.............1
SATISFECHO?.................................2
NO SATISFECHO NI DISATISFECHO?...............3 79
UN POCO DISATISFECHO?........................4
MUY DISATISFECHO?............................5

63. SU FARMACEUTICO LE COBRO POR ESTE SERVICIO ADEMAS DEL COSTO DE LA MEDICINA?

(escoga uno) si...1
no ...(vaya a la 67)........................2 1

64. USTED SW ACUERDA LE COSTO?

(escoga uno) si...1
no....(vaya a la 67)........................2 2

65. CUANTO FUE?

(cantidad en dolares) $_____._____ 3, 4, 5, 6

66. USTED PIENZA QUE FUE POCO, MUCHO, O BUEN PRECIO?

(escoga uno) muy bajo.......................................1
muy alto.......................................2 7
bien...3

67. ESTAS SON LAS CONDICIONES QUE PERMITEN RECETAR AL FARMACEUTICO. NORMALMENTE, A QUIEN CONSULTARIA PRIMERO USTED, AL DOCTOR O AL FARMACEUTICO SI TIENE DE LOS PROBLEMAS SIGUIENTES?

a. DOLORES EN GENERAL (escoga uno) farmaceutico..........1
doctor................2 8
otra respuesta........3

b. DOLOR DE OIDO (escoga uno) farmaceutico..........1
doctor................2 9
otra respuesta........3

c. HEMORRIDES (escoga uno) farmaceutico..........1
doctor................2 10
otra respuesta........3

d. CALAMBRES DE PIERNA (escoga uno) farmaceutico..........1
doctor................2 11
otra respuesta........3

e. VITAMINAS CON FLORURO (para prevenir caries)
(escoga uno) farmaceutico..........1
doctor................2 12
otra respuesta........3

f. NAUSEA Y VOMITOS (escoga uno) farmaceutico..........1
doctor................2 13
otra respuesta........3

g. ORINACION DOLOROSA (escoga uno) farmaceutico..........1
doctor................2 14
otra respuesta........3

h. ALERGIAS (COMO NARIZ TUPIDA, ESTORNUDOS, Y CATARRO)
(escoga uno) farmaceutico..........1
doctor................2 15
otra respuesta........3

i. OXIUROS (escoga uno) farmaceutico..........1
doctor................2 16
otra respuesta........3

j.INFECIONES DE PIEL Y SALPULLIDOS (escoga uno) farmaceutico..........1
doctor................2 17
otrs respuesta........3

k.CALLOS Y VERRUGAS (escoga uno) farmaceutico..........1
doctor................2 18
otra respuesta........3

l.PULGAS (escoga uno) farmaceutico..........1
doctor................2 19
otrs respuesto........3

68. CONSIDERE LA LISTA QUE TERMINAMOS, USTED DIRIA QUE ESTA LEY ESTA BIEN COMO ESTA ESCRITA, O USTED LE DARIA MAS O MENOS AUTORIDA PARA RECETAR AL FARMACEUTICO?

(escoga uno) mas...................................1
menos.................................2 20
la ley esta bien como esta............3
no sabe/ no esta seguro...............4

69. USTED PIENSA QUE ES UNA BUENA IDEA TENER UNA LEY QUE PERMITA A LOS FARMACEUTICOS RECETAR MEDICINAS?

(escoga uno) si....................................1
no....................................2 21
no sabe/ no esta seguro...............3

70. USTED PIENSA QUE ES UNA BUENA IDEA PERMITIR A OTRO TIPO DE PROFESIONALES DE SALUD QUE NO SON DOCTORES RECETAR MEDICINAS COMO...

a. ASISTENTES DE DOCTOR? si..........................1
no..........................2 22
no sabe/no esta seguro.......3

b. ENFERMERAS GRADUADAS? si..........................1
no..........................2 23
no sabe/no esta seguro.......3

c. CHIROPRACTICOS?
si...........................1
no...........................2 24
no sabe/no esta seguro.......3

d. OCULISTAS?
si...........................1
no...........................2 25
no sabe/no esta seguro.......3

71. USTED DEJARIA QUE SU FARMACEUTICO LE RECETE MEDICINAS EN EL FUTURO?
(escoga uno) si.....................................1
no.....................................2 26
no esta seguro.........................3

72. SI EL FARMACEUTICO LE RECETA UNA MEDICINA, USTED LE PAGARIA POR SU SERVICIO ADEMAS DEL PRECIO DE LA MEDICINA?

(escoga uno) si.....................................1 27
no....(vaya a la 74)...................2
no esta seguro (vaya a la 74)..........3

73. CUANTO SERIA UN BUEN PRECIO POR EL SERVICIO?
(diga una cantidad entre $1.00 y $25.00)

$_____._____ 28, 29, 30, 31

74. SI EL RECOMIENDA SIN RECETA, USTED TODAVIA LE PAGARIA POR EL SERVICIO?

(escoga uno) si.....................................1 32
no....(vaya a la 76)...................2
no esta seguro (vaya a la 76)..........3

75. CUANTO SERIA BUEN PRECIO POR EL SERVICIO?

$_____._____ 33, 34, 35, 36

76. SI EL LE RECOMIENDA QUE USTED VEA UN DOCTOR, USTED TODAVIA LE PAGARIA POR EL SERVICIO?

(escoga uno) si.....................................1
no....(vaya a la 78)...................2 37
no esta seguro (vaya a la 78)..........3

77. CUANTO SERIA UN BUEN PRECIO POR EL SERVICIO?

$_____._____ 38, 39, 40, 41

78. SI SU COMPANIA SEGUROS PAGA POR EL SERVICIO, USTED USARIA EL SERVICIO MAS?

(escoga uno) si....................................1
no....................................2 42
no esta seguro........................3

79. USTED DIRIA QUE SU SALUD PARA SU EDAD ES...?

(escoga uno) EXCELENTE..............................1
BUENO..................................2 43
REGULAR................................3
O MALO.................................4

80. EN EL ANO PASADO, CUANTAS VESES LE PREGUNTO AL FARMACEUTICO POR RECOMENDACIONES O INFORMACION?

(# de veces) ______________ 44, 45

81. (Pregunte solamente si la persona que sabe de la ley nuena) DESDE MAYO, CUANDO LA LEYE NUEVA EMPEZO, USTED HA BUSQUADO EL CONSEJO DEL FARMACEUTICO____?

(escoga uno) MAS FRECUEMENTE....................1
MENOS FRECUEMENTE..................2 46
CASI LO MISMO......................3

82. (Pregunte de todas las personas) USTED PIENSA QUE DE AHORA EN ADELANTE BUSCARIA
EL AVISO DEL FARMACEUTICO______________________________?

(escoga uno) MAS A MENUDO.......................1
MENOS A MENUDO.....................2 47
CASI LO MISMO......................3

83. CUANTAS FARMACIAS HAY EN EL BARRIO DONDE USTED COMPRA?

(# de tiendas o farmacias)____________________ 48, 49

84. CUANTOS ANOS DE COLEGIO USTED PIENSA QUE SE NECESITAN HASERCE UN FARMACEUTICO?

(# de anos)____________________ 50, 51

85. CUANTOS ANOS DEL COLEGIO USTED PIENZA QUE SE NECESITAN HASERCE UN DOCTOR?

(# de anos)____________________ 52, 53

AHORA, PARA TERMINAR, NECESITO INFORMACION COMO...

86. SEXO?

hombre.............................1	54
mujer..............................2	

87. SU EDAD?

(# de anos) ____________________ 55, 56

88. RAZA?

(escoge uno)	blanco.............................1	
	negro..............................2	
	Indio Americano,Esquimal...........3	57
	Asiatico,Indio Asiatico, o Isleno del pasifico..............4	
	hispano............................5	
	otro(especifica)______________6	

89. ESTADO MARITAL?

(escoge uno)	soltero....(vaya a la 91)..........1	
	casado.............................2	
	separado...(vaya a la 91)..........3	58
	divorciado.(vaya a la 91)..........4	
	viudo......(vaya a la 91)..........5	

90. USTEDES TIENEN TRABAJO FIJO?

(escoge uno) si.................................1 59
no.................................2

91. LOS INGRESOS DE SU FAMILIA ES MAS O MENO DE 10 MIL?

(escoge uno) menos de $10,000 al ano...........1

entre $10,000 y $30,000 al ano.....2

MAS DE 30 MIL? entre $30,000 y $50,000 al ano.....3 60

MAS DE 50 MIL? entre $50,000 y $75,000 al ano.....4

MAS DE 75 MIL? mas de $75,000 al ano.............5

92. CUANTOS ANOS DE COLEGIO USTED HA TENIDO?

(chequea uno)
a. 01____ningun colegio
02____algun colegio elementario
03____graduado de elementario
04____algun escuela secondaria
05____graduado de escuela secondario
06____alguna universidad 61,
07____graduado de universidad 62
08____algun trabajo graduado
09____titulo universidad
10____doctorado
11____titulo profesional en medicina
12____licenciado en leyes
13____otro (especifica)

(solamente para el codigo)
b. Colegio elementario
(0 a 8 anos hasta escuela secondario)
1 a 3 anos).......................1
Escuena secondaria 63
(4 anos)..........................2
Universidad
(1 a 3 anos)......................3
Universidad
(4 anos)..........................4
Universidad
(5 anos o mas)....................5

93. USTED TIENE HIJOS QUE VIVEN CON USTED?

(circle one) si................................ 1 64
no.(omite #94)....................2

94. CUALE SON LAS EDADES?

(ponga edades) a.__________ 65,66

b.__________ 67,68

c.__________ 69,70

d.__________ 71,72

e.__________ 73,74

f.__________ 75,76

g.__________ 77,78

h.__________ 1,2

95. CUANTAS PERSONAS DEPENDIENTES HAY EN TOTAL HAY EN SU CASA?

(ponga el #) __________ 3,4

96. USTED O ALGUIEN EN SU FAMILIA O SUS AMIGOS PERTENECEN A ALGUNA PROFESION DE SALUD?

(escoge uno) si............1 5
no............2

ESTO TERMINA LAS PREGUNTAS.
USTED TIENE ALGUNA PREGUNTA SOBRE ESTE ESTUDIO?

(El estudio es para ver si podemos identificar menos costosas alternativas para el cuidado medico.)

MUCHAS GRACIAS POR SU AYUDA.

Para el que entrevisto: 97. Por favor, ponga los ultimos tre numeros del
codigo del 6,
condado que viene de la pagina de telefonos_________. 7,
8

APPENDIX D
STATISTICAL TABLES FOR ADDITIONAL ANALYSES

Table D-1. Point Biserial Correlations Between Specific Consumer Conditions and Their Approval of the Law.

	Approval		
Existing Condition	N	r	p
Respondent age	362	-.16	.0004
Number of years seeing physician	314	.00	.9569
Number of physician visits in past year	363	-.03	.5130
Availability of physician	362	-.05	.3133
Access to physician	362	.05	.4234
Monetary cost of visiting physician	327	-.05	.2599
Satisfaction with physician	362	-.08	.1262
Number of years trading with present pharmacy	284	-.01	.8152
Number of times asking pharmacist for advice in past year	349	.17	.0015
Years of college believed required of pharmacists	300	.05	.4400
Patient-pharmacist bond	270	.13	.0274
Undefined attitude toward pharmacists	363	.22	.0001

Table D-2. Point Biserial Correlations Between Specific Consumer Conditions and Their Intent to Allow a Pharmacist to Prescribe.

	Intent		
Existing Condition	N	r	p
Respondent age	362	-.20	.0003
Number of years seeing physician	320	.01	.7502
Number of physician visits in past year	364	-.06	.2205
Availability of physician	363	-.10	.0507
Access to physician	363	.05	.3883
Monetary cost of visiting physician	324	-.07	.1875
Satisfaction with physician	363	-.14	.0084
Number of years trading with present pharmacy	290	-.03	.5298
Number of times asking pharmacist for advice in past year	350	.20	.0002
Years of college believed required of pharmacists	300	.02	.7387
Patient-pharmacist bond	278	.11	.0634
Undefined attitude toward pharmacists	364	.25	.0001

Table D-3. Product Moment Correlations of Selected Variables.

	Age	Visits	Times	Bond	Undefined Attitude
Age (Respondent age)	1.0000 .0000 400				
Visits (# of times visiting physician in past year)	.0494 .3247 400	1.0000 .0000 402			
Times (# of times asking pharmacist for advice in past year)	-.1420 .0055 380	.0406 .4288 382	1.0000 .0000 382		
Bond (Summated scores for the statements of pharmacist bond)	.1396 .0155 300	.0366 .5259 302	.2417 .0001 288	1.0000 .0000 302	
Undefined Attitude (Summated scores for the three statements measuring the unknown attitude toward pharmacists)	.0877 .0799 400	-.0561 .2614 402	.2064 .0001 382	.4454 .0001 302	1.0000 .0000 402

Table D-4. Point Biserial Correlations Between Consumer Bond with a Pharmacist and Acceptance of Pharmacist Prescribing.

	Pharmacist-Patient Bond		
	N	r	p
Consumers Aged 54 and Below			
Consumer Approval of the Law	154	.2658	.0003
Consumer Intent to Allow a Pharmacist to Prescribe	154	.2877	.0001
Consumers Aged 55 and Above			
Consumer Approval of the Law	99	.0250	.8043
Consumer Intent to Allow a Pharmacist to Prescribe	99	.0178	.8627

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BIOGRAPHICAL SKETCH

Stan Pennock, born in Austin, Texas, received his Bachelor of Science in Pharmacy from the University of Texas at Austin in 1971. His father is also a pharmacist and they studied under many of the same professors, only 20 years apart. Stan later completed his Master of Science in Pharmacology also at the University of Texas at Austin in 1973, and received the degree of Master of Business Administration from the University of Dallas in 1979. He has five years of hospital pharmacy experience and five years of retail pharmacy experience.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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